



Sexual Medicine Society of North America, Inc **PROGRAM**



InterContinental New Orleans

19th

Annual Fall Scientific Meeting of
SMSNA, November 21 - 24, 2013

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ACCREDITATION

CME Activity Description

The 19th Annual Fall Scientific Meeting of SMSNA will promote, encourage, and support the highest standards of practice, research, education, and ethics in the study of the anatomy, physiology, pathology, diagnosis, and treatment of human sexual function and dysfunction and provide a forum for the free exchange and discussion of new ideas, thoughts, and concepts in this field.

The SMSNA seeks to identify existing and emerging issues in the field of human sexual function and dysfunction, provide accurate and credible information to medical professionals, develop standards and guidelines for impotence research and practice, and produce educational programs that bring leading-edge concepts of research, clinical practice, ethics, and politics to health care professionals interested in impotence and related matters.

Program Planning Committee

Mohit Khera, MD - Course Director/Scientific Program Chair
Arthur Burnett, MD - SMSNA President
Tobias Kohler, MD, MPH - Abstract Review Chair
John P. Mulhall, MD - CME Organizer
Hossein Sadeghi-Nejad, MD, FACS - SMSNA Secretary

David Casalod - SMSNA Executive Director
Tessa Benitez - Association Manager
Vivian Gies - Senior Conference Manager
Kate Ray - Administrative Director for Education, SMSNA

CME Activity Objectives

At the conclusion of the meeting, attendees should be able to:

1. Identify the link between erectile dysfunction and cardiovascular disease;
2. Describe the impact of stem cells in the treatment of erectile dysfunction;
3. Identify treatment options for recurrent priapism;
4. Recognize the effect cancer has on the sexual health of men and women;
5. Identify strategies used to manage the cancer survivor with sexual problems;
6. Explain the controversies in medical and surgical management of Peyronie's disease;

7. Identify strategies used to minimize penile implant infections;
8. List current vasectomy guidelines;
9. Identify techniques to improve vasectomy outcomes;
10. Describe the challenges with identifying and treating patients with post finasteride syndrome;
11. Interpret the current state-of-the-art knowledge in epidemiology, physiology and pathophysiology of female sexual function and dysfunction;
12. Identify challenges and opportunities in sexual medicine education.

Attendance at this SMSNA activity does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this activity.

Intended Audience

While the target audience is diverse, our program is aimed at fulfilling the needs of urologists, primary care physicians, internists, cardiologists, endocrinologists, gynecologists, psychiatrists, psychologists, therapists, physician assistants, nurse practitioners, residents, fellows, medical students, and researchers interested in sexual medicine. This educational event will be publicized through direct mass mailing, the internet and advertisements in major medical journals. This meeting will present up-to-date information on an update in the management and treatment of erectile dysfunction, cancer survivorship, testosterone replacement therapy, vasectomy, Peyronie's disease and premature ejaculation. In addition, up-to-date information on surgical therapy which has experienced significant innovations in prostheses and surgical techniques and surgical site infection prevention will be addressed. A broad diversity of healthcare providers is emerging with direct care for patients with sexual dysfunctions. The information will cover many of the related fields, such as anatomy, physiology, epidemiology, pathophysiology, diagnosis, discovery, research, treatment and prevention.

Syllabus

The syllabus/presentations will be available on a password-secured part of the SMSNA website after the CME activity.


Log in details:

Username: smsna2013

Password: presentnow

Continuing Education Credit

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of Oklahoma, College of Medicine and the Sexual Medicine Society of North America. The University of Oklahoma, College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The University of Oklahoma, College of Medicine designates this live activity for a maximum of 23.25 AMA PRA Category 1 Credits™. Physicians should claim  the credit commensurate with the extent of their participation in the activity.

CME Record of Attendance

A Record of Attendance is provided to you during on-site registration. The Record of Attendance allows attendees to calculate their own credits of participation during the educational activity.

The total number of credits participants can earn per day is noted on the Record of Attendance. The far right column must be completed each day in the appropriate box to record the actual number of credits you participated in during the educational activity. It is recommended that you record your actual credits daily as you proceed through the CME activity. Record your attendance on the worksheet by filling out and totaling the 'Time Earned' column to accurately reflect your attendance. Physicians should only claim the credit commensurate with the extent of their participation in the activity.

Upon conclusion of the CME activity, please total the number of credits you have recorded on the form, sign it, and return it with your evaluation to the registration desk.

~~The duplicate sheet of the form represents your Record of Attendance, which you must retain for your records. Please make sure the number of credits claimed is accurate. No other documentation is provided to you after this CME activity.~~

~~The Record of Attendance can be used for requesting credits in accordance with state licensing boards, specialty societies, or other professional associations.~~

CME Activity Evaluation

After attending this activity, you will be emailed a link to the evaluation. **ALL PARTICIPANTS ARE REQUIRED TO EVALUATE THE ACTIVITY TO RECEIVE CREDIT.** OU/CPD will track attendance and evaluations. If you do not receive an email within one week, please contact Susie Dealy in the OUHSC/CPD office by sending an email to Susie-dealy@ouhsc.edu or calling 405-271-2350, ext. 1. Please Note: Some e-mail servers do not recognize the e-mail from OUHSC and will place it in a "junk" or "spam" file. The evaluation link will be included in the e-mail from Susie Dealy, so please add Susie-dealy@ouhsc.edu as a contact in your contact/safe senders list or check your e-mail "junk or spam" folder for her message.

Evaluations are open for only three weeks after the activity. Evaluation forms are programmed to open at the end of the activity and close three weeks later. If you have difficulties with the online evaluation, please call us at 405-271-2350 or 888-682-6348.

Your feedback is very important to us and will be used for planning future programs, as well as identifying faculty strengths and opportunity for growth. The CME activity evaluation will only take a few minutes to complete online.

Recording Device Policy

No recording devices, audio or visual, may be used during SMSNA activities. Duplication, distribution, or excerpting of this program, without the express written permission of SMSNA, is strictly prohibited.

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Electronic Devices

Please turn all electronic devices (cellular telephones, pagers, etc.) to silent mode. As a courtesy to the presenters and other participants, phone calls should be taken outside of the general session.

WELCOME MESSAGE PRESIDENT



I extend my warm welcome to all of you for the 19th Annual Fall Scientific Meeting of our Society! This meeting has been gaining prominence each year with its particular objective to advance the scientific knowledge and practice of sexual medicine in all areas of male and female sexual health. Our meeting continues this unwavering mission. This year's scientific program chair, Dr. Mohit Khera, has

worked collaboratively with the Society's chairperson of the basic science committee, Dr. Michael DiSanto, assembling an outstanding program of master lecturers, panels, point-counterpoint debates, video sessions, and poster sessions that will provide a wealth of information in diverse topical areas encompassing exciting and timely advances in our field. The program will be of interest to specialists in all disciplines of sexual medicine whether you are a physician, mental health clinician, scientific researcher, or professional healthcare practitioner of any kind.

I would like to commend our local arrangements committee, Drs. Wayne Hellstrom, Trinity Bivalacqua, and Eric Laborde for planning a superb social program. Festive events have been planned that will provide you with the ultimate New Orleans experience including its abundant culture, cuisine, and history. You can expect great food, lively music, and fun, and as I understand, there will be a genuine New Orleans happening on Friday night you should not miss.

The meeting officially begins with the all-day APN/PA professional academic symposium. In the afternoon, the traditional opening academic session of basic scientific presentations commences with an expert panel forum on the evidentiary scientific link between erectile dysfunction and the cardiometabolic syndrome, which reprises a "White Paper" communique' of this topic. On Thursday evening, the welcome reception provides an opportunity to create new friendships and connect with old friends. On Friday and Saturday, the academic program continues with both clinical and basic scientific sessions. As you will note in the program highlights, presentations addressing sexual function and cancer survivorship, androgen therapeutics, vasectomy guidelines, post-finasteride syndrome future research agenda, sexual education, and the "President's Address" on advances in priapism management with a special presentation involving a patient will be covered.

Additional programming encompasses presentations on areas of epidemiology of sexual dysfunctions, erectile dysfunction, Peyronie's disease, hypogonadism, ejaculatory dysfunction, pelvic pain, and female sexual health. All aspects of basic scientific discovery, sexual performance counseling, pharmacotherapy as well as surgical techniques will be amply discussed. On Sunday, we will host a traditional cadaveric laboratory course for urology resident trainees with gratitude extended to our corporate sponsors for their consistently strong support of this endeavor.

The Society has gained a rich tradition of inclusiveness, scholarship, and camaraderie that is well displayed with its every year's scientific meetings. This year's fall meeting is no exception. I extend my welcome all and look forward to your attendance and participation in promoting discovery, sharing knowledge, and advancing the field of sexual medicine in its mission of scientific achievement and clinical excellence in service to our patients. Thank you for your energy and commitment in making our Society distinctive and the premier organization in North America devoted to preserving the sexual health of men and women.

Arthur L. Burnett, M.D., M.B.A., F.A.C.S.

The Johns Hopkins Medical Institutions
President, Sexual Medicine Society of North America

WELCOME MESSAGE LOCAL ARRANGEMENTS COMMITTEE

The 2013 SMSNA Fall Scientific Meeting highlights 19 years of continuing education in sexual medicine. Besides advancing the field, we make a point of sharing a good time with current and future friends and colleagues. There is no better place to celebrate than in New Orleans! In addition to a superb scientific program crafted by Dr. Mohit Khera, the local arrangements committee is showcasing the rising of post-Katrina-New Orleans; namely its musical heritage, culinary uniqueness, and overall joie de vie.

Each of the four evenings' entertainment agendas center on music, food, and other festivities: Dewey Sampson and his Jazz trio perform on Wednesday night, Jen Howard and her eclectic brand of music takes the stage during the welcoming ceremonies on Thursday night; a surprise event through the streets of the French Quarter and a local party experience on Bourbon Street is scheduled for Friday night (don't be late!); and our annual banquet on Saturday evening features world-famous Deacon John and his amazing ensemble. You won't be able to sit down!

Come enjoy the food, music, libations, and hospitality that New Orleans has to offer during the 2013 SMSNA's Fall Scientific Meeting.

Nota bene: Don't consume, more than two Hurricanes from Pat O'Brien's in a single evening. You'll pay for it dearly... you have been warned!

Laissez les bon temps rouler!

Your local arrangements committee,



Wayne J.G. Hellstrom



Eric Laborde



Trinity J. Bivalacqua

COMMITTEES

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2001	Robert P. Nelson, Jr., MD *
2000	John J. Mulcahy, MD
1999	Irwin Goldstein, MD
1998	Arnold Melman, MD
1997	Alvaro Morales, MD
1996	Drogo K. Montague, MD
1995	William F. Furlow, MD

* *deceased*

GENERAL MEETING INFORMATION

Meeting Date and Venue

Thursday November 21 - Sunday November 24, 2013

InterContinental New Orleans

444 St Charles Ave,
New Orleans, LA 70130

Registration/Information Desk Hours

Thursday November 21, 2013: 8:00 am - 5:00 pm
Friday November 22, 2013: 6:30 am - 5:00 pm
Saturday November 23, 2013: 7:00 am - 5:00 pm
Sunday November 24, 2013: 7:30 am - 10:00 am

Exhibit Hall Hours

Thursday November 21, 2013: 12:30 pm - 7:00 pm
Friday November 22, 2013: 10:00 am - 4:00 pm
Saturday November 23, 2013: 7:00 am - 3:00 pm

Mobile app/website

The complete program of the 19th Annual Fall Scientific Meeting of SMSNA is available on an app for your mobile device (Android and iOS).

Download the app in the App Store (Apple) or Google Play Store (Android) or manually by searching for "Status Plus". Once downloaded and installed, you can find our event in the "Available Events" section. Simply tap the "Install Event" button to download all event content into the app.

Now, all content is contained locally on your device and you can use the app without having to be connected to the Internet. The complete program is also available on our mobile website mobile.smsna.org.

Evening Functions

Welcome Reception

Date: Thursday November 21, 2013
Time: 5:00 pm - 7:00 pm
Location: La Salle B/C Ballroom - Le Salon
Attire: Business casual

Welcome to the 19th Annual Fall Scientific Meeting of SMSNA! Catch up with friends and colleagues, and meet with exhibitors following the first day of the scientific program.

New Orleans Themed Night

Date: Friday November 22, 2013
Time: 6:30 pm - 10:00 pm
Location: Special Event Venue *Meet at the InterContinental ground level, at the "Blue Dogs" no later than 6:30 pm
Attire: Business casual
Cost: One ticket is included in attendee and spouse registration fees.

The laid back and relaxed culture of New Orleans makes it a perfect location for a very special Themed Night in the "Big Easy". Join SMSNA this evening and let the good times roll!

Annual Banquet

Date: Saturday November 23, 2013
Time: 7:00 pm - 10:00 pm
Location: La Salle A Ballroom
Attire: Business
Cost: One ticket is included in attendee and spouse registration fees.

Join SMSNA for a fantastic evening full fabulous cuisine, New Orleans fun and live music featuring Deacon John. For many decades Deacon John has symbolized the ultimate in dance music. Deacon, with his band Deacon John & the Ivories, was the first rock 'n' roll musician to play with the New Orleans Symphony in 1970. At the invitation of President Bush, he played at the Congressional Ball at the White House in 2005 and in 2007, he was chosen to sing for the historic inauguration of Louisiana Governor Bobby Jindal. Don't miss this special event!

APN-PA SYMPOSIUM BREAKOUT

Thursday November 21, 2013

9:00 am - 2:00 pm

APN-PA Symposium Breakout

Location: Pelican Room

Moderator: Jeffrey Albaugh, PhD, APRN, CUCNS

9:00 am - 9:05 am

Welcome/Introduction

Jeffrey Albaugh, PhD, APRN, CUCNS

9:05 am - 10:05 am

The Role of the APN/PA in Evaluation and Management of Erectile Dysfunction

Kathy Marchese, MS, ANP

10:05 am - 10:25 am

Cardiovascular Disease and its Effect on Erectile Function

Kevin L. Billups, MD

10:25 am - 10:40 am

Men's Health: Hypertension and ED

Kenneth Mitchell, MPAS, PA-C

10:40 am - 11:00 am

An Update on Metabolic Syndrome, Diabetes and ED

Penny K. Jensen, DNP, FNP, FAANP

11:00 am - 11:20 am

Contemporary Management of Men with LUTS and ED

Tobias Kohler, MD, MPH

11:20 am - 11:35 am

Break

11:35 am - 12:20 pm

Evaluation for Hypogonadism and Current Trends in Testosterone Replacement Therapy

Susanne Quallich, BSN, MSN

12:20 pm - 1:00 pm

An ANP/MD Collaborative Approach to Medical Evaluation and Management of Peyronie's Disease

Laurence A. Levine, MD

Gina Jo Ugo, PA

1:00 pm - 2:00 pm

Networking Lunch

2:00 pm - 3:45 pm

APN/PA Assessment of Chronic Pelvic Pain

Location: Pelican Room

Moderator: Jeffrey Albaugh, PhD, APRN, CUCNS

2:00 pm - 2:45 pm

Evaluating & Managing Sexual Pain in Women

Susan Kellogg-Spadt, PhD, CRNP, IF

2:45 pm - 3:30 pm

Evaluating & Managing Sexual Pain in Men

Robert M. Moldwin, MD

3:30 pm - 3:45 pm

Break

3:45 pm - 5:00 pm

APN-PA - Hands-On Stations

Location: Acadian Room

Moderator: Jeffrey Albaugh, PhD, APRN, CUCNS

Pelvic Pain and the Pelvic Floor

Susan Kellogg-Spadt, PhD, CRNP, IF

Penile Injections and Priapism

Joseph B. Narus, DNP, APRN, NP-BC

Vacuum Device

Jeffrey Albaugh, PhD, APRN, CUCNS

Susanne Quallich, BSN, MSN

Testopel

Kenneth Mitchell, MPAS, PA-C

IPP Troubleshooting

Hossein Sadeghi-Nejad, MD, FACS

Male Genital Exam

Jeffrey Albaugh, PhD, APRN, CUCNS

Susanne Quallich, BSN, MSN

SCIENTIFIC PROGRAM

Thursday November 21, 2013

8:00 am - 5:00 pm

Registration/Information Desk Open

Location: Foyer Floor 3

12:30 pm - 7:00 pm

Exhibit Hall Open

Location: La Salle B/C Ballroom - Le Salon

1:00 pm - 1:10 pm

Welcome and Program Introductions

Location: La Salle A Ballroom

Speaker: Mohit Khera, MD

1:10 pm - 2:30 pm

Session I - Linking Erectile Dysfunction and Cardiometabolic Syndrome

Location: La Salle A Ballroom

Moderators: Michael E. DiSanto, PhD

Arthur L. Burnett II, MD

1:10 pm - 1:20 pm

Endothelium

Biljana Musicki, PhD

1:20 pm - 1:30 pm

Smooth Muscle

Kanchan Chitaley, PhD

1:30 pm - 1:40 pm

Autonomic Nervous System

Anthony J. Bella, MD

1:40 pm - 1:50 pm

Hormones

Noel Kim, PhD

1:50 pm - 2:00 pm

Metabolics

Nestor Gonzalez-Cadavid, PhD

2:00 pm - 2:10 pm

Summary and Clinical Integration

Michael E. DiSanto, PhD

2:10 pm - 2:30 pm

Q & A

2:30 pm - 2:45 pm

Break - Visit Exhibits

Location: La Salle B/C Ballroom - Le Salon

2:45 pm - 3:25 pm

Session II - Modern Use of Stem Cells in Sexual Medicine

Location: La Salle A Ballroom

Moderators: Carol A. Podlasek, PhD

Nestor Gonzalez-Cadavid, PhD

2:45 pm - 3:05 pm

Stem Cells and ED

Trinity J. Bivalacqua, MD, PhD

3:05 pm - 3:25 pm

Stem Cells and Peyronie's Disease

Wayne J.G. Hellstrom, MD

3:25 pm - 4:55 pm

Session III - Top 10 Abstracts on Basic Science

Location: La Salle A Ballroom

Moderators: Arthur L. Burnett II, MD

John P. Mulhall, MD

001 PIOGLITAZONE IS PROTECTIVE OF ERECTILE FUNCTION IN A RAT MODEL OF POST-PROSTATECTOMY ERECTILE DYSFUNCTION

Louis Aliperti¹; George Lasker¹; Joshua Hellstrom¹; Korey Walter¹; Edward Pankey¹; Philip Kadowitz, PhD¹; Landon Trost, MD²; Suresh Sikka, PhD¹; Wayne Hellstrom, MD, FACS¹

1: Tulane University, New Orleans, LA; 2: Mayo Clinic, Rochester, MN

002 S-NITROSOGLUTATHIONE REDUCTASE REGULATES NITRIC OXIDE DEPENDENT PENILE ERECTION

Gwen Lagoda, MS¹; Tabitha Goetz¹; Arthur L. Burnett, MD, MBA¹

1: The James Buchanan Brady Urological Institute and Department of Urology, The Johns Hopkins School of Medicine, Baltimore, Maryland.

003 EFFECT OF LDD175 ON THE MODULATION OF CORPORAL SMOOTH MUSCLES TONE

Sung Won Lee¹; Seol Ho Choo, MD¹; Mee Ree Chae¹; Hyun Hwan Sung, MD¹; Deok Hyun Han, MD¹; Su Jeong Kang¹; Jong Kwan Park, MD, PhD²

1: Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea; 2: Chonbuk National University School of Medicine, Jeonju, Korea

004 ENOS AND NNOS UNCOUPLING IN TYPE 1 DIABETIC PENIS AND MAJOR PELVIC GANGLIA

Biljana Musicki, PhD¹; Gwen Lagoda, MS¹; Seza Sezen, PhD¹; Arthur Burnett, MD²

1: Johns Hopkins University, Baltimore, MD; 2: Johns Hopkins Hospital, Baltimore, MD

005 EARLY COMBINED TREATMENT WITH AVANAFIL AND ADIPOSE TISSUE-DERIVED STEM CELLS PROMOTES RECOVERY OF ERECTILE FUNCTION IN A RAT MODEL OF POSTPROSTATECTOMY INDUCED ERECTILE DYSFUNCTION

Ahmet Gokce¹; George F. Lasker²; Zakaria Abd Elmageed¹; Sree Harsha Mandava¹; Sharika Hagan¹; Mostafa Bouljihad³; Philip J. Kadowitz²; Asim B. Abdel-Mageed¹; Suresh C. Sikka¹; Wayne J. Hellstrom¹

1: Tulane University School of Medicine, Department of Urology, New Orleans, LA; 2: Tulane University School of Medicine, Department of Pharmacology, New Orleans, LA; 3: Tulane National Primate Research Center, New Orleans, LA

006 INTRATUNICAL INJECTION OF MODIFIED ADIPOSE TISSUE-DERIVED STEM CELLS EXPRESSING HUMAN INTERFERON A-2B FOR TREATMENT OF ERECTILE DYSFUNCTION IN A RAT MODEL OF PEYRONIE'S DISEASE

Ahmet Gokce¹; Zakaria Y. Abd Elmageed¹; George F. Lasker²; Mostafa Bouljihad³; Hogyoung Kim¹; Prem Sant Sangkum¹; Philip J. Kadowitz²; Asim B. Abdel-Mageed¹; Suresh C. Sikka¹; Wayne J. Hellstrom¹

1: Tulane University School of Medicine, Department of Urology, New Orleans, LA; 2: Tulane University School of Medicine, Department of Pharmacology, New Orleans, LA; 3: Tulane National Primate Research Center, New Orleans, LA

007 MYOSTATIN, A KEY INHIBITOR OF SKELETAL MUSCLE MASS AND PROFIBROTIC FACTOR, IS EXPRESSED IN THE PENILE CORPORAL AND ARTERIAL SMOOTH MUSCLE, AND MAY AFFECT PENILE GROWTH AND SMOOTH MUSCLE CONTENT

Istvan Kovanecz, PhD¹; Robert Gelfand, PhD¹; Maryam Masouminia, MD¹; Dolores Vernet, PhD¹; Jacob Rajfer, MD²; Nestor Gonzalez-Cadavid, PhD²

1: Department of Surgery, Division of Urology, LABioMed Research Institute at Harbor-UCLA Medical Center, Torrance, CA; 2: Department of Urology, UCLA School of Medicine, Los Angeles, CA

008 DOES DEPENDENT EFFICACY OF HUMAN ADIPOSE TISSUE-DERIVED STEM CELLS IN STREPTOZOCIN-INDUCED DIABETIC RATS WITH ERECTILE DYSFUNCTION

Geehyun Song, MD¹; Dalsan You, MD, PhD¹; Choung-Soo Kim, MD, PhD¹; Tai Young Ahn, MD, PhD¹; Myoung Jin Jang, MS²; Bo Hyun Kim, MS²

1: Asan Medical Center, Seoul, South Korea; 2: Laboratory of Cell Therapy and Stem Cell Biology, Asan Institute for Life Sciences, Asan Medical Center, Seoul, Korea

009 OPIORPHIN MEDIATED UP-REGULATION OF HIF1A IS AN EARLY EVENT IN THE DEVELOPMENT OF PRIAPISM IN SICKLE CELL MICE

Shibo Fu, PhD¹; Yi Wang, PhD¹; Moses Tar, MD¹; Kelvin Davies, PhD¹

1: Albert Einstein College of Medicine, Bronx, NY

010 NITRIC OXIDE SYNTHASE IS NECESSARY FOR NORMAL UROGENITAL DEVELOPMENT

Christopher Bond, MS¹; Omer Onur Cakir, MD¹; Kevin McVary, MD²; Carol Podlasek, PhD¹

1: Northwestern University; 2: Southern Illinois University School of Medicine

4:55 pm - 5:00 pm

Highlights of New Orleans and the Social Program

Location: La Salle A Ballroom

Speaker: Wayne J.G. Hellstrom, MD

5:00 pm - 7:00 pm

Welcome Reception in Exhibit Hall

Location: La Salle B/C Ballroom - Le Salon

SCIENTIFIC PROGRAM

Friday November 22, 2013

6:30 am - 5:00 pm

Registration/Information Desk Open

Location: Foyer Floor 3

6:45 am - 7:45 am

SMSNA Special Breakfast Symposium on Men's Sexual Health

Location: Pelican Room

7:30 am - 5:00 pm

Non-Moderated Posters

Location: Les Continents

7:45 am - 9:00 am

Session IV - Plenary Session - Cancer Survivorship

Location: La Salle A Ballroom

*Moderators: Gregory Broderick, MD, FACS
Irwin Goldstein, MD*

7:45 am - 8:00 am

Statistical Impact of Cancer Survivorship for Men and Women

Gregory Broderick, MD, FACS

8:00 am - 8:15 am

Running a Survivorship Clinic for Women

Don S. Dizon, MD

8:15 am - 8:30 am

Running a Survivorship Clinic for Men

Christian Nelson, PhD

8:30 am - 8:45 am

Couple Experience

*Ralph Alterowitz, MEA
Barbara Alterowitz*

8:45 am - 9:00 am

Panel Discussion

*Moderators: Gregory Broderick, MD, FACS
Irwin Goldstein, MD*

9:00 am - 10:00 am

Session V - Video Session

Location: La Salle A Ballroom

*Moderators: Culley C. Carson III, MD
Steven K. Wilson, MD*

9:00 am - 9:20 am

Penoscrotal Surgical Techniques

**1. Plication Repair of Peyronie's Deformities
2. High Submuscular IPP Reservoir Placement**
Allen F. Morey, MD

9:20 am - 9:40 am

Surgical Advances in Prosthetic Surgery

Steven K. Wilson, MD

9:40 am - 10:00 am

Simultaneous Placement of Penile Implant and Male Sling Through Single Perineal Incision

Run Wang, MD

10:00 am - 4:00 pm

Exhibit Hall Open

Location: La Salle B/C Ballroom - Le Salon

10:00 am - 10:15 am

AUA Update

*Location: La Salle A Ballroom
Speaker: Gopal Badlani, MD*

10:15 am - 10:30 am

Break - Visit Exhibits

Location: La Salle B/C Ballroom - Le Salon

10:30 am - 11:15 am

Session VI - Androgen Therapeutics: Changing Concepts in Testosterone Replacement Therapy

*Location: La Salle A Ballroom
Moderators: Mohit Khara, MD
Kevin L. Billups, MD*

10:30 am - 10:45 am

Novel Adjuvant Treatments to TRT

Andrew R. McCullough, MD

10:45 am - 11:05 am

Preserving Fertility in the Hypogonadal Patient*Larry I. Lipshultz, MD*

11:05 am - 11:15 am

Q & A

11:15 am - 12:00 pm

Session VII - State-of-the-Art Lecture*Location: La Salle A Ballroom**Moderators: Mohit Khera, MD**Kevin L. Billups, MD*

11:15 am - 11:45 am

Testosterone Therapy in the Modern Era*Abraham Morgentaler, MD*

11:45 am - 12:00 pm

Q & A

12:00 pm - 1:30 pm

Industry Sponsored Lunch Symposium*Location: Pelican Room*

1:30 pm - 3:00 pm

Session VIII - Concurrent Moderated Posters**Poster Session I - Basic Science***Location: Pontalba Room**Moderators: Michael E. DiSanto, PhD**Johanna Hannan, PhD***011 ADENOSINE SIGNALING NETWORK INNORMAL PENILE ERECTION***Jiaming Wen, MD, PhD¹; Chen Ning²; Yingbo Dai³; Yujin Zhang⁴; Michael R. Blackburn⁴; Rodney E. Kellems⁴; Yang Xia, MD, PhD⁴**1: Department of Biochemistry and Molecular Biology, The University of Texas Medical School at Houston, Houston, Texas, USA, Department of Urology, 2nd Zhejiang Hospital, Zhejiang University, China; 2: Department of Biochemistry and Molecular Biology, The University of Texas Medical School at Houston, Houston, Texas, USA, Department of Urology, Friendship Hospital, Capital Medical School, Beijing, China; 3: Department of Biochemistry and Molecular Biology, The University of Texas Medical School at Houston, Houston, Texas, USA, Department of Urology, The Third Xiangya Hospital, Hunan, China; 4: Department of Biochemistry and Molecular Biology, The University of Texas Medical School at Houston, Houston, Texas, USA***012 IMPACT OF ACUTE AND CHRONIC ALCOHOL ADMINISTRATION ON PENILE ERECTION***Jae-Seog Hyun, MD, PhD¹; Song Wook Jae, MD²; Jae Hwi Choi, MD²; Sung Chul Kam, MD²**1: Gyeongsang National University Hospital, Jinju, South Korea; 2: Gyeongsang National University***013 NOVEL GENETIC FACTORS LINKED TO PEYRONIE'S AND DUPUYTREN'S DISEASES***Alexander W. Pastuszak, MD, PhD¹; Juan C. Bournat, PhD¹; Carolina J. Jorgez, PhD¹; Larry I. Lipshultz, MD¹; Dolores J. Lamb, PhD¹**1: Baylor College of Medicine, Houston, TX***014 MECHANISMS OF DECREASED RAT BULBOSPONGIOSUS MUSCLE ACTIVITY AFTER BOTULINUM TOXIN TYPE A INJECTION.***Sree Harsha Mandava, MD¹; Zakaria Abd Elmageed, PhD¹; George Lasker¹; Ahmet Gokce¹; Landon Trost, MD²; Louis Aliperti¹; Philip Kadowitz, PhD¹; Asim Abdel-Mageed, PhD¹; Wayne Hellstrom, MD, FACS¹; Suresh Sikka, PhD¹**1: Tulane University, New Orleans, LA; 2: Mayo Clinic Rochester, MN***015 PRECLINICAL STUDIES REVEAL MOLECULAR BASIS OF ELEVATED ADENOSINE SIGNALING IN PRIAPISM AND NOVEL THERAPIES***Chen Ning, MD, PhD¹; Jiaming Wen, MD, PhD²; Yujin Zhang, MD, PhD³; Yingbo Dai, MD, PhD⁴; Rodney E. Kellems, PhD⁵; Yang Xia, MD, PhD³**1: Departments of Biochemistry and Molecular Biology, The University of Texas - Houston Medical School, Houston, TX, USA, Department of Urology, Beijing Friendship Hospital, Capital Medical University, Beijing, 100050, P.R.China; 2: Departments of Biochemistry and Molecular Biology, The University of Texas - Houston Medical School, Houston, TX, USA, Department of Urology, Second Affiliated Hospital, Zhejiang University, Hangzhou, Zhejiang 310009, P.R.China; 3: Departments of Biochemistry and Molecular Biology, The University of Texas - Houston Medical School, Houston, TX, USA; 4: Departments of Biochemistry and Molecular Biology, The University of Texas - Houston Medical School, Houston, TX, USA, Department of Urology, Third XiangYa Hospital, Central South University, Changsha, Hunan 410013, P.R.China; 5: Departments of Biochemistry and Molecular Biology, The University of Texas - Houston Medical School, Houston, TX, USA; 2Department of Urology, Beijing Friendship Hospital, Capital Medical University, Beijing, 100050, P.R.China***016 A POTENT ANTIOXIDANT 4-HYDROXY-2,5,6-TRIAMINOPYRIMIDINE (HTP) RELAXES CAVERNOSAL SMOOTH MUSCLE AND IS A POTENTIAL THERAPEUTIC AGENT FOR ERECTILE DYSFUNCTION***Bashir M. Rezk¹; Zakaria Y. Abd Elmageed²; Serap Gur²; Hala Taha¹; Merhan E.Y. Khedr¹; Suresh Sikka²; Asim B. Abdel Mageed²; Wayne J.G. Hellstrom²**1: Southern University New Orleans, Department of Biology, New Orleans LA; 2: Tulane University School of Medicine, Department of Urology, New Orleans, LA*

017 IS THE ENDOGENOUS VASOACTIVE PEPTIDE BRADYKININ A KEY MEDIATOR OF PENILE ERECTION IN THE HUMAN MALE^x

Stefan Ückert, Professor¹; Andreas Bannowsky, MD²; Armin Becker, MD, Professor³

1: *Hannover Medical School, Dept. of Urology & Urological Oncology, Hannover, Germany*; 2: *Osnabrück Municipal Hospital, Dept. of Urology, Osnabrück, Germany*; 3: *Ludwig-Maximilians-University, Campus Grosshadern, Dept. of Urology, Munich, Germany*

018 PENILE TRACTION THERAPY IMPROVE PENILE CURVATURE IN PEYRONIE'S RAT MODEL

Haocheng Lin, MD, PhD¹; Run Wang, MD, FACS²

1: *University of Texas Health Science Center at Houston, Houston, Texas*; 2: *University of Texas Health Science Center at Houston and MD Anderson Cancer Center, Houston, Texas*

019 THE ANTI-INFLAMMATORY AND ANTI-FIBROSIS EFFECTS OF ANTHOCYANIN EXTRACTED FROM BLACK SOYBEAN ON A PEYRONIE'S DISEASE RAT MODEL

Woong Jin Bae¹; Dong Wan Sohn¹; Seol Kim¹; Su Jin Kim¹; Hyuk Jin Cho¹; Sung Hoo Hong¹; Ji Youl Lee¹; Tae-Kon Hwang¹; Sae Woong Kim¹; Chae Yeon Park¹

1: *Department of Urology, College of Medicine, The Catholic University of Korea, Seoul, Korea*

020 TIME COURSE OF TREATMENT EFFECT OF AUTOLOGOUS ADIPOSE STROMAL VASCULAR FRACTION IN TYPE 2 DM RATS (ZFDM) WITH ERECTILE DYSFUNCTION: PRELIMINARY DATA

Geehyun Song, MD¹; Dalsan You, MD, PhD¹; Choung-Soo Kim, MD, PhD¹; Tai Young Ahn, MD, PhD¹; Myoung Jin Jang, MS²; Bo Hyun Kim, MS²

1: *Asan Medical Center, Seoul, South Korea*; 2: *Laboratory of Cell Therapy and Stem Cell Biology, Asan Institute for Life Sciences, Asan Medical Center, Seoul, Korea*

021 INFLUENCE OF THE NEW HERBAL MIXTURES MADE ACCORDING TO THE KOREAN TRADITIONAL REMEDIES ON SPERM QUALITY

Su Jin Kim¹; Woong Jin Bae¹; Yong Sun Choi¹; Seol Kim¹; Hyuk Jin Cho¹; Sung Hoo Hong¹; Ji Youl Lee¹; Tae-Kon Hwang¹; Sae Woong Kim¹

1: *Department of Urology, Seoul St.Mary's Hospital*

022 A COMPARATIVE STUDY OF NON-VIRAL TRANSFECTION METHODS FOR EFFECTIVE GENE DELIVERY TO CORPORAL SMOOTH MUSCLE CELLS

Sung Won Lee¹; Seol Ho Choo¹; Mee Ree Chae¹

1: *Department of Urology, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea*

023 PRELIMINARY REPORT ABOUT THE INFLUENCE OF AMBULATORY BLADDER PRESSURE MONITORING DEVICE ON THE ERECTILE FUNCTION

Su Jin Kim¹; Woong Jin Bae¹; Seol Kim¹; Hyuk Jin Cho¹; Sung Hoo Hong¹; Ji Youl Lee¹; Tae-Kon Hwang¹; Sae Woong Kim¹

1: *Department of Urology, Seoul St.Mary's Hospital*

024 CHARACTERIZATION OF NEURONAL CELL DEATH IN THE MAJOR PELVIC GANGLION FOLLOWING CAVERNOUS NERVE INJURY

Johanna Hannan, PhD¹; Maarten Albersen, MD, PhD²; Joseph W. Watson¹; Xiaopu Liu, BS¹; Arthur L. Burnett, MD, MBA¹; Trinity Bivalacqua, MD, PhD¹

1: *Johns Hopkins Medical Institutes, Baltimore, MD*; 2: *University Hospitals Leuven, Leuven, Belgium*

025 PELVIC NERVE INJURY LEADS TO INCREASED RHO-KINASE MEDIATED ADRENERGIC VASOCONSTRICTION OF THE DISTAL VAGINA

Johanna Hannan, PhD¹; Vinson M. Wang, BS¹; Jaron Tepper, BS¹; Xiaopu Liu, BS¹; Fabio Castiglione, MD²; Arthur L. Burnett, MD, MBA; Petter Hedlund, PhD³; Trinity J. Bivalacqua, MD, PhD¹

1: *Johns Hopkins Medical Institutes, Baltimore, MD*; 2: *Urological Research Institute, Milan, Italy*; 3: *Lund University, Lund, Sweden*

026 INHIBITION OF RHO-KINASE PRESERVES ERECTILE FUNCTION AND INCREASES NEURONAL OUTGROWTH FOLLOWING CAVERNOUS NERVE INJURY

Johanna Hannan, PhD¹; Xiaopu Liu, BS¹; Arthur L. Burnett, MD, MBA¹; Trinity J. Bivalacqua, MD, PhD¹

1: *Johns Hopkins Medical Institutes, Baltimore, MD*

027 EXPRESSION AND DISTRIBUTION OF THE TRANSIENT RECEPTOR POTENTIAL CATIONIC CHANNEL A1 (TRPA1) IN THE HUMAN CLITORIS - COMPARISON TO MALE PENILE ERECTILE TISSUE

Stefan Ückert, Professor¹; Knut Albrecht, MD, PhD²; Andreas Bannowsky, MD³; Markus Kuczyk, MD, Professor¹; Petter Hedlund, MD, Professor⁴

1: *Hannover Medical School, Dept. of Urology & Urological Oncology, Hannover, Germany*; 2: *Hannover Medical School, Institute of Legal Medicine, Hannover, Germany*; 3: *Osnabrück Municipal Hospital, Dept. of Urology, Osnabrück, Germany*; 4: *Linköping University, Faculty of Medicine, Dept. of Clinical Pharmacology, Linköping, Sweden*

028 ANTHOCYANIN EXTRACTED FROM BLACK SOYBEAN INDUCES APOPTOSIS OF DU-145 CELLS IN VITRO AND INHIBITS XENOGRAFT GROWTH: INVOLVEMENT IN MODULATING EXPRESSION OF BAX/ BCL-2 AND P53

Woong Jin Bae¹; Seol Kim¹; Su Jin Kim¹; Hyuk Jin Cho¹; Sung Hoo Hong¹; Ji Youl Lee¹; Tae-Kon Hwang¹; Sae Woong Kim¹

1: *Department of Urology, College of Medicine, The Catholic University of Korea, Seoul, Korea*

1:30 pm - 2:30 pm**Session IX A (Concurrent Session) - Vasectomy***Location: La Salle A Ballroom**Moderators: Ira D. Sharlip, MD**Larry I. Lipshultz, MD***1:30 pm - 1:40 pm****Update Current AUA Guidelines***Ajay K. Nangia, MBBS***1:40 pm - 2:05 pm****Vasectomy: Optimum Surgical Technique, Preoperative Counseling and Postoperative Management***Douglas G. Stein, MD***2:05 pm - 2:30 pm****Panel Discussion***Ira D. Sharlip, MD**Douglas G. Stein, MD**Larry I. Lipshultz, MD**Ajay K. Nangia, MBBS***1:30 pm - 2:30 pm****Session IX B (Concurrent Session) - Post Finasteride Syndrome: Fact or Fiction?***Location: Cabildo Room**Moderators: Irwin Goldstein, MD**Nelson Bennett Jr., MD***1:30 pm - 2:15 pm****(Debate) PFS: Fact or Fiction***Abdulmageed M. Traish, PhD**Wayne J.G. Hellstrom, MD***2:15 pm - 2:30 pm****Report from Research Colloquium***John P. Mulhall, MD***2:30 pm - 3:15 pm****Session X - State-of-the-Art Lecture***Location: La Salle A Ballroom**Moderator: Belinda Morrison, MBBS***President's Lecture: Update on Priapism 2013***Arthur L. Burnett II, MD**David Sterling***3:15 pm - 3:30 pm****Break - Visit Exhibits***Location: La Salle B/C Ballroom - Le Salon***3:30 pm - 5:00 pm****Session XI - Moderated Posters****Poster Session II - Epidemiology***Location: Vieux Carré A Room**Moderators: Ronald W. Lewis, MD**Anthony J. Bella, MD***029 CRITICAL ANALYSIS OF CIRCADIAN RHYTHMS IN TESTOSTERONE PRODUCTION IN OLDER MEN***Christian Nelson, PhD¹; Darren Katz, MD¹; Melanie Bernstein, BA¹; John Mulhall, MD¹**1: Memorial Sloan-Kettering Cancer Center, New York, NY***030 SEXUAL HEALTH IN MALE CHILDHOOD CANCER SURVIVORS: A REPORT FROM THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)***Chad W.M. Ritenour, MD¹; Kristy D. Seidel, MS²; Wendy Leisenring, ScD²; Ann Mertens, PhD³; Karen Wasilewski-Masker, MD³; Margaret Shnorhavorian, MD⁴; Charles A. Sklar, MD⁵; John A. Whitton, MS²; Marilyn Stovall, PhD⁶; Louis S. Constine, MD⁷; Gregory T. Armstrong, MD⁸; Leslie L. Robison, PhD⁸; Lillian Meacham, MD³**1: Emory University School of Medicine, Atlanta, GA, USA;**2: Fred Hutchinson Cancer Research Center, Seattle, WA, USA;**3: Emory University School of Medicine, Atlanta, GA, USA;**Children's Healthcare of Atlanta, Atlanta, GA, USA; 4: Seattle**Children's Hospital, University of Washington, Seattle, WA, USA;**5: Memorial Sloan-Kettering Cancer Center, New York, NY, USA;**6: The University of Texas, M.D. Anderson Cancer Center, Houston,**TX, USA; 7: University of Rochester, Rochester, NY, USA; 8: St.**Jude Children's Research Hospital, Memphis, TN, USA***031 THE CUPID TRIAL: CARDIOLOGY CLINIC PATIENTS ARE AT HIGH RISK FOR ED, LUTS, & EJD***Joel Koenig, MD¹; Randy Sulaver, MD¹; Cynthia Bednarchik, FNP-BC¹; Aaron Benson, MD²; Bradford Stevenson, MD¹; Kevin McVary, MD, FACS¹; Tobias Köhler, MD, FACS¹**1: SIU School of Medicine, Springfield, IL; 2: Vanderbilt University School of Medicine, Nashville, TN***032 PRELIMINARY RESULTS FROM PROSPECTIVE LONG-TERM FOLLOW-UP USING VALIDATED QUESTIONNAIRES OF CHILDREN WHO UNDERWENT PROXIMAL HYPOSPADIAS REPAIR***Sarah Fraumann, MD¹; Heidi Stephany, MD²; Douglass Clayton¹; John Thomas¹; John Pope¹; Mark Adams¹; John Brock¹; Stacy Tanaka¹**1: Vanderbilt University Medical Center, Nashville, TN; 2: University of Pittsburgh School of Medicine, Pittsburgh, PA***033 PENILE FRACTURE: 9-YEAR EXPERIENCE AT A TERTIARY CARE CENTER***Anthony Esposito, BA¹; Elizabeth Phillips, MD¹; Ricardo Munarraz, MD¹**1: Department of Urology, Boston University School of Medicine, Boston, MA***034 PRIAPISM AND OVERACTIVE BLADDER SYMPTOMS IN SICKLE CELL DISEASE: IS THERE A LINK?***Belinda Morrison, MD¹; Wendy Madden, RN²; Marvin Reid, MD²; Arthur Burnett, MD, MBA³**1: University of the West Indies, Mona, Kingston; 2: UWI, Mona, Kingston; 3: Johns Hopkins Hospital, Baltimore, MD*

035 THE POSITIVE IMPACT OF EXERCISE ON ENDOTHELIAL AND SEXUAL DYSFUNCTION IN SEDENTARY OVERWEIGHT INDIVIDUALS

Cynthia M. Pruss, PhD¹; Maria Tina Maio Twofoot, BSCh¹; Robert Ross, PhD¹; Michael Adams, PhD¹

1: Department of Biomedical and Molecular Sciences, School of Kinesiology and Health Studies, Queen's University, Kingston, ON, Canada

036 SERUM HIGH-SENSITIVITY C-REACTIVE PROTEIN LEVELS AND RESPONSE RATE TO 5 MG TADALAFIL ONCE DAILY IN PATIENTS WITH ERECTILE DYSFUNCTION AND DIABETES

Hyun Jun Park, MD, PhD¹; Nam Cheol Park, MD, PhD¹

1: Urology, Pusan National University Hospital, Busan, Korea

037 SEVERITY OF ERECTILE DYSFUNCTION AND DEPRESSION IN HEALTHY MIDDLE-AGED MEN

Jacqueline O'Boyle, BS¹; Rupa Iyengar, MPH²; Cynara Maceda, MD³; Simonette Sawit, MD⁴; Heather Beebe, BS³; Jacqueline Moline, MD, MSc⁵; Natan Bar-Chama, MD³; Mary Ann McLaughlin, MD, MPH³

1: Icahn School of Medicine at Mount Sinai, New York, NY, and New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY; 2: Icahn School of Medicine at Mount Sinai, New York, NY and St. George's University, True Blue, Grenada, West Indies; 3: Icahn School of Medicine at Mount Sinai, New York, NY; 4: Icahn School of Medicine at Mount Sinai, New York, NY and The Medical City, Pasig City, Philippines; 5: Icahn School of Medicine at Mount Sinai, New York, NY and Hofstra North Shore LIJ School of Medicine, Great Neck, NY

038 ERECTILE DYSFUNCTION AFTER RECURRENT ISCHEMIC PRIAPISM IN PATIENTS WITH AND WITHOUT SICKLE CELL DISEASE: A COMPARATIVE ANALYSIS OF RISK FACTORS

Uzoma Anele, MD¹; Jordan D. Dimitrakoff, MD, PhD¹; Irene N. Trueheart, RN¹; Arthur L. Burnett, MD, MBA¹

1: The James Buchanan Brady Urological Institute, Department of Urology, Baltimore, MD

039 SYSTEMIC INFLAMMATION IS NOT DIRECTLY ASSOCIATED WITH ERECTILE DYSFUNCTION IN AGING MEN. COMMUNITY BASED CROSS-SECTION STUDY

Won Ki Lee, MD, PhD¹; Sang Kon Lee, MD, PhD²; Dae Yul Yang, MD, PhD³

1: Hallym University Chuncheon Sacred Heart Hospital; 2: Department of Urology, College of Medicine, Hallym University, Chuncheon Sacred Heart Hospital, Chuncheon, Korea; 3: Department of Urology, College of Medicine, Hallym University, Kangdong Sacred Heart Hospital, Seoul, Korea

040 QUALITATIVE ASSESSMENT OF MEN RECEIVING PENILE IMPLANT EDUCATIONAL INFORMATION: THE DISCONNECT BETWEEN PATIENT AND SURGEON PERCEPTIONS.

Christian Nelson, PhD¹; Angela Ginkel, BS²; John Mulhall, MD¹

1: Memorial Sloan-Kettering Cancer Center, New York, NY;

2: American Medical Systems, Minnetonka, MN

041 LIBIDO AND SEXUAL FUNCTION AND SATISFACTION SCORES IN THE INFERTILE MALE

Helen R. Levey, DO, MPH¹; Marguerite Thomer, MD¹; Claudia Berrondo, MD¹; Justin Budnik, BS, BA¹; Changyong Feng, PhD¹; Jeanne O'Brien, MD¹

1: Rochester, NY

042 PREVALENCE AND CLINICAL CHARACTERISTICS OF HYPOACTIVE SEXUAL DESIRE DISORDER IN A CLINIC-BASED COHORT OF MEN

Vikram Soni, MD¹; Mohit Khera, MD, MBA, MPH¹

1: Scott Department of Urology, Baylor College of Medicine, Houston, TX

043 PRIAPISM: REVIEW OF ETIOLOGIES AND MANAGEMENT OF 79 CASES AT A SINGLE INSTITUTION

Stephen Kappa, MD, MBA¹; Shreyas Joshi, MD¹; Douglas Milam, MD¹

1: Vanderbilt University, Nashville, TN

044 PREVALENCE OF DELAYED EJACULATION AND PENILE CURVATURE IN AN UNSELECTED PRIMARY CARE POPULATION

Gregory Lowe, MD¹

1: Ohio State University Wexner Medical Center, Columbus, Ohio

045 DIAGNOSIS AND TREATMENT OF POST-PROSTATECTOMY ERECTILE DYSFUNCTION AND URINARY INCONTINENCE IN YOUNG PRIVATELY INSURED PATIENTS, 2007-2010

Bradley D. Figler, MD¹; John L. Gore²; Frederick P. Rivara³; Sarah K. Holt²; Bryan B. Voelzke²; Hunter Wessells²

1: Thomas Jefferson University Department of Urology Philadelphia, Pennsylvania; 2: University of Washington Department of Urology Seattle, Washington; 3: Seattle Children's Hospital Department of Pediatrics Seattle, Washington

046 PREVALENCE OF DEPRESSION, DECREASED LIBIDO AND ERECTILE DYSFUNCTION AMONG INFERTILE MEN.

Helen R. Levey, DO, MPH¹; Marguerite Thomer, MD¹; Claudia Berrondo, MD¹; Justin Budnik, BS, BA¹; Changyong Feng, PhD¹; Jeanne O'Brien, MD¹

1: Rochester, NY

3:30 pm - 5:00 pm

Session XI - Moderated Posters

Poster Session III - Diagnosis & Imaging

Location: Vieux Carré B Room

Moderators: Alan W. Shindel, MD

William O. Brant, MD

047 VALIDATION OF THE PATIENT GLOBAL IMPRESSION OF IMPROVEMENT (PGI-I) FOR PENILE PROSTHESIS

Sean Douglas, MD¹; Austin Lutz, MD²; Puneet Masson, MD³; Kevin McVary, MD³; Chris Winters, MD⁴; Eric Laborde, MD²

1: Ochsner/LSU, New Orleans, LA; 2: Ochsner Clinic Foundation, New Orleans LA; 3: Northwestern, Chicago, Illinois; 4: Louisiana State University

048 NON-RESPONDERS, PARTIAL RESPONDERS AND COMPLETE RESPONDERS TO PDE-5I THERAPY ACCORDING TO IIEF CRITERIA: VALIDATION OF AN ANCHOR-BASED, TREATMENT RESPONDER CLASSIFICATION

May Yang, MPH¹; Xiao Ni, PhD²; Angelina Sontag, PhD³; Heather Litman, PhD¹; Raymond Rosen, PhD¹

1: New England Research Institutes, Watertown, MA; 2: Eli Lilly and Company, Indianapolis, IN; 3: Lilly USA, LLC, Indianapolis, IN

049 THE SELF-ESTIMATION INDEX OF ERECTILE FUNCTION - NO SEXUAL INTERCOURSE (SIEF-NS): A MULTIDIMENSIONAL SCALE TO DIAGNOSE ERECTILE DYSFUNCTION IN THE EVENT OF NO SEXUAL INTERCOURSE

Yiming Yuan, MD, PhD¹; Zhichao Zhang, MD¹; Bing Gao, MD¹; Jing Peng, MD¹; Weidong Song, MD¹; Zhongcheng Xin, MD¹; Yinglu Guo, MD¹

1: Andrology Center of Peking University First Hospital

050 IMPACT OF DM AND ELEVATED BMI ON ENDOTHELIAL FUNCTION IN MEN WITH ED

Jake Fantus, MD¹; Jason Kovac, MD, PhD¹; Lisette Gomez, MD¹; Marshall Gonzales, PA-C¹; Mohit Khera, MD¹; Dolores Lamb, PhD¹; Larry Lipshultz, MD¹

1: Baylor College of Medicine

051 PENILE DOPPLER ULTRASOUND EVALUATION OF PATIENTS WITH ERECTILE DYSFUNCTION, HYPERTENSION AND/OR DIABETES MELLITUS: A SINGLE INSTITUTIONAL ANALYSIS

Cormac E. O'Neill, MD¹; Zachary Klaassen, MD¹; Andrew Ostrowski¹; Carolyn Cutler¹; Qiang Li, MD, PhD¹; Casey McCraw, MD¹; Patrick J. Fox, MD¹; Ronald W. Lewis, MD¹

1: Medical College of Georgia - Georgia Regents University, Augusta, GA

052 THE PENILE DOPPLER PARAMETERS AND CLINICAL RISK FACTORS IN MEN WITH ERECTION HARDNESS SCORE 3-4 AFTER INTRACAVERNOUS INJECTION

Qiang Li, MD, PhD¹; Carolyn Cutler¹; Andrew Ostrowski¹; Zachary Klaassen, MD¹; Patrick Fox, MD¹; Casey McCraw, MD¹; Roger Chen, MD¹; Brittani Barrett¹; Ronald W. Lewis, MD¹

1: Georgia Regents University, Augusta, Georgia

053 DUAL ENERGY COMPUTED TOMOGRAPHY: NOVEL TECHNIQUE IN STAGING PEYRONIE'S DISEASE

Jacob Jorns, MD¹; Candice Bolan, MD¹; Joseph Cernigliaro, MD¹; Gregory Broderick, MD¹

1: Mayo Clinic Florida

054 IS IT USEFUL PREMATURE EJACULATION DIAGNOSTIC TOOL (PEDT) SCORES TO CLASSIFY PREMATURE EJACULATION SYNDROME INTO WALDINGER'S SUBGROUPS OF PE?

Woo Suk Choi¹; Sang Hoon Song²; Hwancheol Son³; Jae-Sung Paick¹

1: Department of Urology, Seoul National University Hospital, Seoul, Korea; 2: Department of Urology, Asan medical center, Seoul, Korea; 3: Department of Urology, Seoul National University Boramae Hospital, Seoul, Korea

055 PRIAPISM IMPACT PROFILE (PIP) QUESTIONNAIRE: DEVELOPMENT AND PRELIMINARY EVALUATION

Arthur L. Burnett, MD, MBA¹; Uzoma Anele, MD¹;

Irene N. Trueheart, RN¹; Jordan D. Dimitrakoff, MD, PhD¹; Leonard R. Derogatis, PhD¹

1: The James Buchanan Brady Urological Institute, Department of Urology, Baltimore, MD

056 UROLOGIST PRACTICE PATTERNS IN THE MANAGEMENT OF PREMATURE EJACULATION IN KOREA; A NATIONWIDE SURVEY IN 2012

Won Ki Lee, MD, PhD¹; Kyung Tae Ko, MD²; Sung Won Lee, MD, PhD³; Ki Hak Moon, MD, PhD⁴; Sae Woong Kim, MD, PhD⁵; Soo Woong Kim, MD, PhD⁶; Dae Yul Yang, MD, PhD²; Kang Su Cho, MD, PhD⁷; Du Geon Moon, MD, PhD⁸; Kweon Sik Min, MD, PhD⁹; Sang-Kuk Yang, MD, PhD¹⁰; Hwancheol Son, MD, PhD⁶; Kwangsung Park, MD, PhD¹¹

1: Hallym University Chuncheon Sacred Heart Hospital; 2: Department of Urology, College of Medicine, Hallym University, Chuncheon, Korea; 3: Department of Urology, College of Medicine, Sungkyunkwan University, Seoul, Korea; 4: Department of Urology, College of Medicine, Yeungnam University, Daegu, Korea; 5: Department of Urology, College of Medicine, Catholic University, Seoul, Korea; 6: Department of Urology, College of Medicine, Seoul National University, Seoul, Korea; 7: Department of Urology, College of Medicine, Yonsei University, Seoul, Korea; 8: Department of Urology, College of Medicine, Korea University, Seoul, Korea; 9: Department of Urology, College of Medicine, Inje University, Busan, Korea; 10: Department of Urology, College of Medicine, Konkuk University, Chungju, Korea; 11: Department of Urology, College of Medicine, Chonnam National University, Gwangju, Korea

057 THE HETEROGENEITY OF SEXUAL MEDICINE SERVICES ON THE WORLD WIDE WEBRoss T. Cockrell, MD¹; Puneet Masson, MD¹*1: Hospital of the University of Pennsylvania, Perelman School of Medicine, Dept of Surgery, Division of Urology***058 3-D COMPARATIVE ANALYSIS OF THE TITAN INFLATABLE PENILE IMPLANT, THE AMS INFLATABLE PENILE IMPLANT AND THE HUMAN CORPUS CAVERNOSUM**Tariq S. Hakky, MD¹; Daniel Martinez, MD¹; Justin Emtage, MD¹; Alberto J. Duboy, MD¹; Philippe E. Spiess, MD¹; Rafael E. Carrion, MD¹*1: Tampa, FL***059 MEASUREMENT OF ENDOTHELIAL DYSFUNCTION VIA PERIPHERAL ARTERIAL TONOMETRY PREDICTS VASCULOGENIC ERECTILE DYSFUNCTION**Jason Kovac, MD, PhD¹; Lisette Gomez¹; Ryan Smith¹; Robert Coward¹; Marshall Gonzales¹; Mohit Khera¹; Dolores Lamb¹; Larry Lipshultz¹*1: Baylor College of Medicine***060 REPRODUCIBILITY OF FORCE OF EJACULATION ASSESSMENT USING CATEGORICAL SCALE BASED ON VIDEO RECORDING**Ali Dabaja, MD¹; Alex Bolyakov¹; Darius A. Paduch, MD, PhD¹; Daniel J. Lee, MD¹*1: Weill Cornell Medical College, NY, NY***061 COMPARISON OF SATISFACTION OF ORGASM AND FORCE OF EJACULATION IN A PROSPECTIVE TRIAL**Daniel J. Lee, MD¹; Ali Dabaja, MD¹; Alexander Bolyakov¹; Darius A. Paduch, MD, PhD¹*1: Weill Cornell Medical College, NY, NY***062 BIOPSY IS CONTRAINDICATED IN THE MANAGEMENT OF PENILE CALCIPHYLAXIS**Cara Cimmino, MD¹; Raymond Costabile, MD²*1: Piedmont Hospital, Atlanta, Georgia; 2: University of Virginia, Charlottesville, Virginia***063 WHAT IS THE ROLE OF BLOOD VISCOSITY IN THE ERECTILE DYSFUNCTION?**Jong Kwan Park¹; Bo Ram Choi, MD²; Hye Kyung Kim, PhD²; Li Tao Zhang, MD²; Sung Won Lee, MD, PhD³*1: Chonbuk National University Hospital; 2: National University Hospital; 3: SungKyunKwanUniversity Samsung Seoul Hospital***064 THE AFFECT OF VARICOCELE ON SPERM PRODUCTION IN MEN WITH AZF-C MICRODELETION**Mary Samplaski, MD¹; Felipe Llano¹; Keith Jarvi, MD¹; Ethan Grober, MD¹; Kirk Lo, MD¹*1: Mount Sinai Hospital, University of Toronto, Toronto, Ontario, Canada***3:30 pm - 5:00 pm****Session XI - Moderated Posters****Poster Session IV - Implant Part I***Location: Acadian Room**Moderators: Gerald Brock, MD, FRCS**Doron S. Stember, MD***065 SURGEON SELECTION FOR PENILE IMPLANT SURGERY IS LARGELY INTERNET DRIVEN**Daniel Reznicek, MD¹; Ashley Wietsma, BA¹; Andrew Kramer, MD¹; Kyle Schuyler, MD¹*1: University of Maryland School of Medicine, Baltimore, MD***066 A PROSPECTIVE EVALUATION OF PENILE MEASURES AND GLANS PENIS SENSORY CHANGES AFTER PENILE PROSTHESIS SURGERY**Dylan Perito, Bachelor¹; Marilyn Nicholson, MD²; Angel Perez, ARNP²; Luanda Siano, PA²; Igor Kislinger, MD²; Fernando Bianco, MD²; Edward Gheiler, MD, FACS²*1: Urological Research Network, Hialeah, FL; 2: Urological Research Network***067 TIMING OF INTERVENTION IS IMPORTANT IN IMPLANTATION OF PENILE PROSTHESIS INTO SCARRED CORPORAL BODIES**Steven Wilson, MD, FACS, FRCS¹; Lance Walsh, MD, PhD²; Andrew Neeb, MD³; Jesse Mills, MD⁴; Tobias Kohler, MD, MPH⁵*1: Institute for Urologic Excellence, Indio, CA; 2: Rancho Mirage, CA; 3: Bend, OR; 4: Denver, CO; 5: Springfield, IL***068 PSEUDO-MALFUNCTION OF COLOPLAST TITAN INFLATABLE PENILE PROSTHESIS WITH OTR PUMP**Bruce Garber, MD¹; Jacob Khurgin, DO¹*1: Dept. of Urology, Hahnemann University Hospital, Drexel University College of Medicine, Philadelphia, PA***069 SUSTAINED COMPLIANCE WITH PROPHYLACTIC ANTIBIOTIC GUIDELINES IS POSSIBLE WITH IMPLEMENTATION OF A SIMPLE PROTOCOL IN UROLOGIC PROSTHETIC SURGERY**Jeffrey Redshaw, BS¹; Elizabeth Mobley, MD¹; Will Lowrance, MD, MPH¹; Jeremy Myers, MD¹; Harriet Hopf, MD¹; William Brant, MD¹*1: Salt Lake City, Utah***070 POSITIVE CULTURE GROWTHS FROM INFECTION-RETARDANT COATED PENILE PROSTHESES AT THE TIME OF REVISION / SAVLAGE SURGERY: A MULTICENTER STUDY**Chris Smith, HS¹; Gerard Henry, MD²; Culley Carson, MD³; John Delk, MD⁴; Craig Donatucci, MD⁵; Caroline Simmons, MS⁴; Steven Wilson, MD⁶*1: Baton Rouge, LA; 2: Shreveport, LA; 3: Chapel Hill, NC; 4: Little Rock, AR; 5: Durham, NC; 6: Palm Springs, CA*

071 ASSOCIATION OF A PRE-SURGICAL CHECKLIST WITH REDUCTION IN PENILE PROSTHESIS INFECTIONS

Benjamin F. Katz¹; Geoffrey Gaunay¹; Yagil Barazani¹; Christian J. Nelson²; Caner Dinlenc¹; Harris M. Nagler¹; Doron S. Stember¹

1: Beth Israel Medical Center of Albert Einstein College of Medicine, New York, NY; 2: Memorial Sloan-Kettering Cancer Center, New York, NY

072 IMPROVED INFECTION OUTCOMES AFTER MULCAHY SALVAGE PROCEDURE AND REPLACEMENT OF INFECTED IPP WITH MALLEABLE PROSTHESIS

Martin Gross, MD¹; Daniel Martinez, MD²; Rafael Carrion, MD²; Paul Perito, MD³; Laurence Levine, MD⁴; Jason Greenfield, MD⁵; Ricardo Munarriz, MD¹

1: Boston University Medical Center, Boston, MA; 2: University of South Florida, Tampa, FL; 3: Perito Urology, Coral Gables, FL; 4: Rush University Medical Center, Chicago, IL; 5: Urology Associates of North Texas, Arlington, TX

073 EFFECT OF OPERATIVE LOCAL ANESTHESIA ON POSTOPERATIVE PAIN OUTCOMES OF INFLATABLE PENILE PROSTHESIS : PROSPECTIVE COMPARISON OF TWO MEDICATIONS

Marilyn Nicholson, MD¹; Fernando Bianco, MD²; Paul Perito, MD²; Angel Perez, ARNP²; Igor Kislinger, MD²; Edward Gheiler, MD, FACS²

1: Urological Research Network; 2: Urological Research Network, Hialeah, FL

074 INFECTION RETARDANT COATED VERSUS NON-COATED PENILE PROSTHESIS CULTURES DURING REVISION SURGERY: A MULTICENTER STUDY

Chris Smith, HS¹; Gerard Henry, MD²; Steven Wilson, MD³; John Delk, MD⁴; Craig Donatucci, MD⁵; Caroline Simmons, MS⁴; Culley Carson, MD⁶

1: Baton Rouge, LA; 2: Shreveport, LA; 3: Palm Springs, CA; 4: Little Rock, AR; 5: Durham, NC; 6: Chapel Hill, NC

075 LONGITUDINAL FOLLOW UP OF PATIENTS UNDERGOING SURGERY FOR PENILE PROSTHESIS EXTRUSION: MANAGEMENT TECHNIQUES AND OUTCOMES

Bruce Kava, MD¹

1: Miami, Florida

076 PENILE CORPORAL HEALING AFTER DISTAL CORPORA-GLANULAR SHUNTS: A NOVEL RAT MODEL

King Chien Joe Lee, MBBS, MRCS, MMED, FAMS¹; Ling De Young, MD, MSc²; Francisco Garcia, MD, FRCSC²; Gerald Brock, MD, FRCSC²

1: National University Hospital, Singapore; 2: St Joseph's Hospital, University of Western Ontario, London, Canada

077 LONG TERM OUTCOMES OF INCISION AND GRAFTING SURGERY FOR THE TREATMENT OF PEYRONIE'S DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

Sree Harsha Mandava, MD¹; Ahmet Gokce¹; George Lasker¹; Landon Trost, MD²; Wayne Hellstrom, MD, FACS¹

1: Tulane University, New Orleans, LA; 2: Mayo Clinic, Rochester, MN

078 AMS 700 CONCEAL RESERVOIR SUB-MUSCULAR PLACEMENT: INITIAL RESULTS WITH 1-YEAR FOLLOW-UP FROM THE PROSPECTIVE REGISTRY OF OUTCOMES WITH PENILE PROSTHESIS FOR ERECTILE RESTORATION (PROPPER)

Ed Karpman, MD¹; Gerard Henry, MD²; William Brant, MD³; Leroy Jones, MD⁴; Brian Kansas, MD⁵; Mohit Khera, MD⁶; Tobias Kohler, MD⁷; Nelson Bennett, MD⁸; Anthony Bella, MD⁹

1: Mountain View, CA; 2: Shreveport, LA; 3: Salt Lake City, UT; 4: San Antonio, TX; 5: Austin, TX; 6: Houston, TX; 7: Springfield, IL; 8: Burlington, MA; 9: Ottawa, Canada

079 FINITE ELEMENT SIMULATION MODELING TO STUDY THE BEHAVIOR OF A NOVEL SHAPE-MEMORY BASED PENILE PROSTHESIS

Brian Le, MD, MA¹; Alberto Colombo, PhD²; Kevin McVary, MD³

1: Brady Urological Institute - Johns Hopkins, Baltimore, MD; 2: Feinberg School of Medicine, Northwestern University, Chicago, IL; 3: Southern Illinois University, Carbondale, IL

080 INTRA-CAVERNOSAL HEMOSTATIC MATRIX APPLICATION TO REDUCE POST-OPERATIVE BLEEDING AFTER INSERTION OF INFLATABLE PENILE PROSTHESIS

Seth D. Cohen, MD, MPH¹; Jean Francois Eid, MD¹

1: Lenox Hill Hospital, NY, NY

081 IMPLEMENTATION OF A TWO-STEP SURGICAL CHECKLIST WHEN REMOVING PENILE IMPLANTS.

Bruce Kava, MD¹

1: Miami, Florida

082 MODELING WITH COLOPLAST TITAN IMPLANT FIXES 70 DEGREES OF CURVATURE BY 3 MONTHS

Daniel Reznicek, MD¹; Ashley Wietsma, BA¹; Andrew Kramer, MD¹; Kyle Schuyler, MD¹

1: University of Maryland School of Medicine, Baltimore, MD

5:00 pm - 5:45 pm

SMS Business Meeting

Location: La Salle A Ballroom

5:45 pm - 6:00 pm

SUPS Business Meeting

Location: La Salle A Ballroom

SCIENTIFIC PROGRAM

Saturday November 23, 2013

7:00 am - 5:00 pm

Registration/Information Desk Open

Location: Foyer Floor 3

7:00 am - 7:45 am

Breakfast in Exhibit Hall

Location: La Salle B/C Ballroom - Le Salon

7:00 am - 3:00 pm

Exhibit Hall Open

Location: La Salle B/C Ballroom - Le Salon

7:00 am - 8:00 am

Non-Moderated Posters - Meet the Authors

Location: Les Continents

8:00 am - 5:00 pm

Non-Moderated Posters

Location: Les Continents

8:00 am - 9:30 am

Session XII - Peyronie's Disease

Location: La Salle A Ballroom

Moderators: Gerald Brock, MD, FRCS

William O. Brant, MD

8:00 am - 8:15 am

Strategies in Accurately Assessing Penile Curvature

Rafael E. Carrion, MD

8:15 am - 8:45 am

Point/Counterpoint: Excision and Grafting: A Dying Procedure

Laurence A. Levine, MD

Jason M. Greenfield, MD

8:45 am - 9:15 am

Point/Counterpoint: Injection Therapy is the Best Non-Surgical Management for Peyronie's Disease

Lawrence S. Hakim, MD, FACS

Martin K. Gelbard, MD

9:15 am - 9:30 am

Panel Q & A

9:30 am - 10:15 am

Session XIII - Ejaculation/Pain

Location: La Salle A Ballroom

Moderators: Michael A. Perelman, PhD, IF

Hossein Sadeghi-Nejad, MD, FACS

9:30 am - 9:45 am

Current Treatment Options for Premature Ejaculation

Stanley Althof, PhD, IF

9:45 am - 10:00 am

Diagnosis and Management of Pelvic Pain

Robert M. Moldwin, MD

10:00 am - 10:15 am

Q & A

10:15 am - 10:30 am

Break - Visit Exhibits

Location: La Salle B/C Ballroom - Le Salon

10:30 am - 11:45 am

Session XIV A (Concurrent Session) - Female Sexual Dysfunction Symposium

Location: Cabildo Room

Moderators: Irwin Goldstein, MD

James G. Pfaus, PhD

10:30 am - 10:45 am

Central Control of FSD and PGAD

James G. Pfaus, PhD

10:45 am - 11:00 am

Vaginal and Clitoral Basic Science Review

Noel Kim, PhD

11:00 am - 11:15 am

Sexual Pain and Surgery

Andrew T. Goldstein, MD, IF

11:15 am - 11:30 am

HRT Considerations - New Data for Vulvovaginal Atrophy

James A. Simon, MD, IF

11:30 am - 11:45 am

Panel Discussion/Q&A

10:30 am - 11:45 am**Session XIV B (Concurrent Session) - Changing Paradigms in the Treatment of ED***Location: La Salle A Ballroom**Moderators: William P. Conners, MD**Lawrence S. Hakim, MD, FACS***10:30 am - 10:45 am****Combination PDE5-i Use: Efficacy, Safety, Practice Patterns***Hossein Sadeghi-Nejad, MD, FACS***10:45 am - 11:00 am****Managing Patients with Venous Leak***Kenneth Mitchell, MPAS, PA-C***11:00 am - 11:10 am****Infection Prevention and Management in Prosthetic Surgery****Update on "North American Consensus Document on Infection of Penile Prostheses (NACDIPP)"***Rabih Darouiche, MD***11:10 am - 11:45 am****Panel Discussion***Moderators: Andrew C. Kramer, MD**John J. Mulcahy, MD**Steven K. Wilson, MD**Gerard D. Henry, MD**Paul E. Perito, MD**Culley C. Carson III, MD**Laurence A. Levine, MD**Francois Eid, MD***11:45 am - 1:15 pm****Industry Sponsored Lunch Symposium***Location: Pelican Room***1:15 pm - 2:25 pm****Session XV - Sexual Medicine Education***Location: La Salle A Ballroom**Moderators: Sue W. Goldstein, BA, IF**Kevin L. Billups, MD***1:15 pm - 1:35 pm****Developing Champions in Sexual Medicine: Update on the Summit on Medical School Education in Sexual Health***Sue W. Goldstein, BA, IF**Kevin L. Billups, MD***1:35 pm - 1:55 pm****Training the Next Generation of Sexual Medicine Clinicians***Andrew C. Kramer, MD***1:55 pm - 2:10 pm****Socioeconomic Update***William F. Gee, MD***2:10 pm - 2:25 pm****Panel Q & A****2:25 pm - 2:45 pm****Break - Visit Exhibits***Location: La Salle B/C Ballroom - Le Salon***2:45 pm - 4:15 pm****Session XVI A - Concurrent Moderated Posters****Poster Session V - Hypogonadism Part I***Location: Pontalba Room**Moderators: Tobias Kohler, MD, MPH**Mohit Khera, MD***083 ORAL ENCLOMID (ANDROXAL) RAISES FREE AND TOTAL SERUM TESTOSTERONE IN HYPOGONADAL MEN: COMPARISON WITH A TOPICAL GEL***Gregory Fontenot, PhD¹; Joseph Podolski, BS¹**1: Repros Therapeutics***084 ORAL ENCLOMID (ANDROXAL) RAISES SERUM TESTOSTERONE AND ESTROGEN IN HYPOGONADAL MEN AND MAY HAVE FAVORABLE EFFECTS ON BONE MINERAL DENSITY***Gregory Fontenot, PhD¹; Joseph Podolski, BS¹**1: Repros Therapeutics***085 THE CUPPID TRIAL: CARDIOLOGY CLINIC PATIENTS ARE AT HIGH RISK FOR SYMPTOMATIC HYPOGONADISM***Joel Koenig, MD¹; Randy Sulaver, MD¹; Cynthia Bednarchik, FNP-BC¹; Aaron Benson, MD²; Bradford Stevenson, MD¹; Kevin McVary, MD, FACS¹; Tobias Köhler, MD, FACS¹**1: SIU School of Medicine, Springfield, IL; 2: Vanderbilt University School of Medicine, Nashville, TN***086 FREE TESTOSTERONE BY DIRECT AND CALCULATED MEASUREMENT VERSUS EQUILIBRIUM DIALYSIS IN A CLINICAL POPULATION***Ravi Kacker, MD¹; Abraham Morgentaler, MD¹**1: Brookline, MA***087 BONE MINERAL DENSITY AND RESPONSE TO TREATMENT IN TESTOSTERONE DEFICIENT MEN YOUNGER THAN 50 YEARS OLD***Ravi Kacker, MD¹; William Conners, MD¹; Abraham Morgentaler, MD¹**1: Brookline, MA*

088 INCREASED BODY FAT IS ASSOCIATED WITH HIGHER LH LEVELS IN TESTOSTERONE-DEFICIENT MEN

Ravi Kacker, MD¹; William Conners, MD¹; Abraham Morgentaler, MD¹

1: Brookline, MA

089 THE CORRELATION BETWEEN BODY MASS INDEX AND EFFECTIVE TESTOSTERONE REPLACEMENT

Jessie Gills, MD¹; Samantha Prats, MS²; Eric Laborde, MD¹

1: Ochsner Medical Center, New Orleans, LA; 2: LSUHSC, New Orleans, LA

090 DOES HYPOGONADISM CONTRIBUTE TO RECURRENT URETHRAL STRICTURE DISEASE?

Clay Mechlin, MD, MS¹; Andrew McCullough, MD²

1: Urology Associates of Central Missouri, Columbia, MO; 2: Albany Medical College, Albany, NY

091 TIMING OF IMPROVEMENT IN LUTS WITH TESTOSTERONE SUPPLEMENTATION WITHIN THE FIRST SIX MONTHS OF THERAPY

Charles Welliver, MD¹; Tobias S. Köhler, MD²; Jeffrey A. Pearl, MD³; Puneet Masson, MD⁴; Kevin T. McVary, MD²

1: Southern Illinois University, Springfield, Illinois; 2: Division of Urology, Southern Illinois University, Springfield, Illinois; 3: Department of Urology, Northwestern University Feinberg School of Medicine, Chicago, Illinois; 4: Division of Urology, University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania

092 VASECTOMY REVERSAL OUTCOMES IN MEN PREVIOUSLY ON TESTOSTERONE REPLACEMENT THERAPY

Douglas Mata, MPH¹; Robert Coward, MD¹; Ryan Smith, MD¹; Jason Kovac, MD¹; Larry Lipshultz, MD²

1: Baylor College of Medicine, Houston, TX; 2: Baylor College of Medicine, Houston, TX

093 LOW TOTAL TESTOSTERONE (TT) IS ASSOCIATED WITH HIGHER MORTALITY IN MEN WITH STAGES 3-5 CHRONIC KIDNEY DISEASE (CKD)

Kiranpreet Khurana, MD¹; Sankar Navaneethan, MD¹; Susana Arrigain¹; Jesse Schold, PhD¹; Joseph Nally, MD¹; Daniel Shoskes¹

1: Cleveland Clinic, Cleveland, OH

094 CAN TREATMENT OF NOCTURIA INCREASE TESTOSTERONE LEVEL IN MEN WITH LATE ONSET HYPOGONADISM?

Ji Yun Chae, MD¹; Jong Wook Kim, PhD¹; Jin Wook Kim, PhD¹; Cheol Yong Yoon, PhD¹; Mi Mi Oh, PhD¹; Je Jong Kim, PhD²; Du Geon Moon, PhD¹

1: Korea University Guro Hospital; 2: Korea University Anam Hospital

095 ADDING THE AROMATASE INHIBITOR ANASTROZOLE (AZ) TO TESTOSTERONE PELLET (TP) THERAPY PROLONGS THERAPEUTIC TESTOSTERONE (T) LEVELS AND TIME BETWEEN TP INSERTIONS: AN OBSERVATIONAL RETROSPECTIVE STUDY.

Clay Mechlin, MD, MS¹; Andrew McCullough, MD²

1: Urology Associates of Central Missouri, Columbia, MO; 2: Albany Medical College, Albany, NY

096 ASSOCIATION BETWEEN DEPRESSION AND HYPOGONADISM IN MIDDLE-AGED MEN

Jacqueline O'Boyle, BS¹; Rupa Iyengar, MPH²; Cynara Maceda, MD³; Simonette Sawit, MD⁴; Heather Beebs, BS³; Jacqueline Moline, MD, MSc⁵; Natan Bar-Chama, MD³; Mary Ann McLaughlin, MD, MPH³

1: Icahn School of Medicine at Mount Sinai, New York, NY, and New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY; 2: Icahn School of Medicine at Mount Sinai, New York, NY and St. George's University, True Blue, Grenada, West Indies; 3: Icahn School of Medicine at Mount Sinai, New York, NY; 4: Icahn School of Medicine at Mount Sinai, New York, NY and The Medical City, Pasig City, Philippines; 5: Icahn School of Medicine at Mount Sinai, New York, NY and Hofstra North Shore LIJ School of Medicine, Great Neck, NY

097 RETROSPECTIVE STUDY OF THE EFFECT OF ANDROGEL TREATMENT IN HYPOGONADISM ON CONCOMITANT MEDICATION DISCONTINUATION

Amit Bodhani¹; Lee Kallenbach²; Joseph Vasey²; Mahesh Fuldeore¹; Steven Hass¹

1: AbbVie Inc, North Chicago, IL; 2: Quintiles Outcome, Cambridge, MS

098 SALVAGE PHARMACOTHERAPY FOR ORGASMIC DYSFUNCTION AFTER TREATMENT FOR TESTOSTERONE DEFICIENCY

Ravi Kacker¹; Abraham Morgentaler¹; William Conners¹

1: Men's Health Boston, Brookline, MA

099 THE IMPACT ON HYPOGONADAL SYMPTOMS OF SWITCHING FROM CLOMIPHENE CITRATE (CC) TO TRANSDERMAL TESTOSTERONE (TDT)

Clarisse Mazzola, MD¹; Boback Berookhim, MD, MBA¹; Darren Katz, MD¹; Serkan Deveci, MD¹; John Mulhall, MD¹

1: New York, NY

100 SAFETY OF TESTOSTERONE THERAPY IN MEN WITH PROSTATE CANCER

Mariam Hult, MD¹; Ravi Kacker, MD¹; William Conners, MD¹; Abraham Morgentaler, MD¹

1: Brookline, MA

2:45 pm - 4:15 pm

Session XVI A - Concurrent Moderated Posters

Poster Session VI - Peyronies & Cosmesis

Location: Vieux Carré B Room

Moderators: John P. Mulhall, MD

Brian S. Christine, MD

101 EFFICACY OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM FOR TREATMENT OF PEYRONIE'S DISEASE BY BASELINE PENILE CURVATURE SEVERITY: TWO LARGE DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

Larry I. Lipshultz, MD¹; Martin K. Gelbard, MD²; Christopher Love, MBBS, FRACS³; Ted M. Smith, PhD⁴; James P. Tursi, MD⁴; Gregory J. Kaufman, MD⁴; Abraham Morgentaler, MD⁵
 1: Baylor College of Medicine, Houston, TX; 2: Urology Associates Medical Group, Burbank, CA; 3: Bayside Urology, Melbourne, Australia; 4: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA; 5: Men's Health Boston, Brookline, MA

102 THE EFFECT OF ADJUNCT PENILE TRACTION THERAPY ON CURVATURE, LENGTH, AND CIRCUMFERENCE IN PATIENTS UNDERGOING INTRALESIONAL INJECTION WITH INTERFERON ALPHA-2B FOR PEYRONIE'S DISEASE

Gregory C. Mitchell, MD, MS¹; Suresh Sikka¹; Wayne J.G. Hellstrom, MD¹
 1: Department of Urology, Tulane University School of Medicine, New Orleans, LA

103 DIABETIC AND NON-DIABETIC PEYRONIE'S PATIENTS: EVALUATION OF PRESENTING SYMPTOMS, SURGICAL MANAGEMENT AND OUTCOMES

Daniel Abbott, BS¹; Laurence Levine, MD¹; Stephen Larsen¹
 1: Rush Medical Center, Chicago, IL

104 PHASE 3, OPEN-LABEL STUDY OF THE SAFETY AND EFFECTIVENESS OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN MEN WITH PEYRONIE'S DISEASE

Laurence A. Levine, MD¹; Beatrice Cuzin, MD²; Stephen Mark, MBChB³; Nigel A. Jones, BSc⁴; Ted M. Smith, PhD⁵; Gregory J. Kaufman, MD⁵; David J. Ralph, MD⁶
 1: Rush University Medical Center, Chicago, IL, USA; 2: Department of Urology and Transplantation, E Herriot Hospital, Lyon, France; 3: Department of Urology, Christchurch Hospital, Christchurch, New Zealand; 4: Auxilium Pharmaceuticals, Inc, Windsor, UK; 5: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA; 6: Institute of Urology, London, UK

105 SAFETY PROFILE OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN THE TREATMENT OF PEYRONIE'S DISEASE WHEN PENILE CURVATURE $\geq 30^\circ$ OR $< 30^\circ$: TWO DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

Wayne Hellstrom, MD, FACS¹; Ronny Tan, MD¹; Yang Ling, PhD²; Genzhou Liu, PhD²; Gregory Kaufman, MD²; Allen Seftel, MD³
 1: Tulane University, New Orleans, LA; 2: Auxilium; 3: Cooper University Hospital, Camden, NJ

106 LONG-TERM OUTCOMES AND PATIENT SATISFACTION AFTER YACHIA CORPOROPLASTY FOR PEYRONIE'S DISEASE: A SINGLE INSTITUTIONAL REVIEW

John M. Kelley¹; Zachary Klaassen, MD¹; Cormac E. O'Neill, MD¹; Qiang Li, MD, PhD¹; Patrick J. Fox, MD¹; Kamran Sajadi, MD²; Run Wang, MD, FACS³; Ronald W. Lewis, MD¹
 1: Medical College of Georgia - Georgia Regents University, Augusta, GA; 2: Oregon Health & Science University, Portland, OR; 3: The University of Texas Health Science Center at Houston, Houston, TX

107 CLINICAL EVALUATION OF TREATMENT OF PEYRONIE'S DISEASE WITH COLLAGENASE CLOSTRIDIUM HISTOLYTICUM: ANALYSIS OF PENILE CURVATURE DEFORMITY BY DURATION OF DISEASE AND PLAQUE CALCIFICATION

Irwin Goldstein, MD¹; Lawrence I. Karsh, MD, FACS²; Jesse N. Mills, MD²; Ted M. Smith, PhD³; Gregory J. Kaufman, MD³; Riwan Shabsigh, MD⁴
 1: San Diego Sexual Medicine, San Diego, CA, USA; 2: The Urology Center of Colorado, Denver, CO, USA; 3: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA; 4: Division of Urology at Maimonides Medical Center, Brooklyn, NY, USA

108 INTEGRATED SAFETY PROFILE OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN CLINICAL STUDIES EVALUATING THE TREATMENT OF PEYRONIE'S DISEASE

Culley C. Carson III, MD, FACS¹; Hossein Sadeghi-Nejad, MD, FACS²; Ted M. Smith, PhD³; Gregory J. Kaufman, MD³; Kimberly Gilbert³; Stanton C. Honig, MD⁴
 1: Carolina Department of Surgery, Chapel Hill, NC; 2: University of Medicine and Dentistry of NJ School of Medicine, Newark, NJ; 3: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA; 4: University of Connecticut School of Medicine, Farmington, CT

109 DORSAL PPLICATION WITHOUT DEGLOVING FOR CORRECTION OF ADULT VENTRAL PENILE DEFORMITIES

Paul H. Chung, MD¹; Lee C. Zhao, MD¹; Timothy J. Tausch, MD¹; Jay Simhan, MD¹; J. Francis Scott, BA¹; Allen F. Morey, MD¹
 1: UT Southwestern Medical Center, Dallas, Texas

110 DETERMINATION OF THE PARENTAL KNOWLEDGE AND BEHAVIORAL PATTERN ON CIRCUMCISION

Ilhami Surer, MD¹; Derya Suluhan, MSc²
 1: Gulhane Military Medical Academy, Department of Pediatric Surgery; 2: Gulhane Military Medical Academy, School of Nursing, Ankara, Turkey

111 CROSS-SECTIONAL ANALYSIS OF PENDULOUS, STRETCHED, AND ERECT PENILE LENGTH MEASUREMENTS IN PEYRONIE'S DISEASE.

Robert DiBernedetto¹; Taylor Peak¹; Prem Sant Sangkum, PhD¹; Ronny Tan, MD¹; Suresh Sikka, PhD¹; Wayne Hellstrom, MD, FACS¹
 1: Tulane University, New Orleans, LA

112 EARLY VERSUS LATE IMPROVEMENT WITH INTRALESIONAL VERAPAMIL THERAPY TO TREAT PEYRONIE'S DISEASE

Vikram Soni, MD¹; Mohit Khera, MD, MBA, MPH¹

1: Baylor College of Medicine, Houston, TX

113 CLINICAL OUTCOMES OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN THE TREATMENT OF SUBJECTS WITH PEYRONIE'S DISEASE BY SUBGROUPS: TWO LARGE DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

Arthur L. Burnett, MD, MBA, FACS¹; Marc Gittelman, MD, FACS²; Ted M. Smith, PhD³; James P. Tursi, MD³; Mohit Khera, MD, MBA, MPH⁴

1: The Johns Hopkins Hospital, Baltimore, MD; 2: South Florida Medical Research, Aventura, FL; 3: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA; 4: Baylor College of Medicine, Houston, TX

114 ERECTILE DYSFUNCTION SECONDARY TO PENILE ARTERY STEAL SYNDROME (PASS)

Tariq Hakky, MD¹; Jonathan G. Pavlinec, MS¹; Daniel Martinez, MD¹; Justin Parker, MD¹; Ricardo Munarriz, MD²; Rafael Carrion, MD¹

1: Tampa, FL; 2: Boston, MA

115 VASECTOMY REVERSAL FOR SEXUAL SYMPTOMS FOLLOWING VASECTOMY

Mary Samplaski, MD¹; Ethan Grober, MD, Med¹

1: University of Toronto, Division of Urology, Mount Sinai & Women's College Hospital, Toronto, Ontario

116 SURVEY OF INTERNATIONAL SOCIETY OF SEXUAL MEDICINE MEMBERS: USE PATTERNS FOR THE VACUUM ERECTION DEVICE

Thomas Facelle, MD¹; Hossein Sadeghi-Nejad, MD, FACS²

1: Rutgers New Jersey Medical School; 2: Rutgers New Jersey Medical School and Hackensack Universeity Medical Center, Hackensack, NJ

117 MODERN UTILIZATION OF PENILE PROSTHESIS SURGERY: A NATIONAL CLAIMS REGISTRY ANALYSIS

Robert Segal, MD, FRCS(C)¹; Stephen Camper, PhD²; Arthur Burnett, MD, MBA³

1: Chesapeake Urology Associates, Baltimore, MD; 2: Endo, Health Economics & Outcomes Research (HEOR), Malvern, PA; 3: Johns Hopkins Medical Institutions, Baltimore, MD

118 BONE SAW FOR CALCIFIED PEYRONIE'S DISEASE PLAQUES

Kevin A. Ostrowski, MD¹; A.Scott Polackwich, MD¹; Daniel D. Dugi III, MD¹; Jason C. Hedges, MD, PhD¹; John M. Barry, MD¹

1: Oregon Health and Science University, Portland, OR

4:15 pm - 5:45 pm

Session XVI B - Concurrent Moderated Posters

Poster Session VII - Medical Pharmacology

Location: Vieux Carré A Room

Moderators: Hossein Sadeghi-Nejad, MD, FACS

Nelson Bennett Jr., MD

119 DIRECT EFFECTS OF TADALAFIL ON LOWER URINARY TRACT SYMPTOMS VS INDIRECT EFFECTS MEDIATED THROUGH ERECTILE DYSFUNCTION SYMPTOM IMPROVEMENT: INTEGRATED ANALYSES OF 4 PLACEBO-CONTROLLED CLINICAL STUDIES

Gerald Brock, MD¹; Kevin McVary, MD²; Claus Roehrborn, MD³; Steven Watts⁴; Xiao Ni⁴; Lars Viktrup⁴; David Wong⁴; Craig Donatucci, MD⁴

1: University of Western Ontario, London, Ontario, Canada; 2: Southern Illinois University, Springfield, IL; 3: University of Texas Southwestern Medical Center at Dallas, Dallas, TX; 4: Eli Lilly and Co, Indianapolis, IN

120 TREATMENT OF LUTS SECONDARY TO BPH WHILE PRESERVING SEXUAL FUNCTION: RANDOMIZED CONTROLLED STUDY OF PROSTATIC URETHRAL LIFT

Kevin McVary, MD, FACS¹; Steven Gange, MD, FACS²; Neal Shore, MD, FACS³; Jonathan Giddens, MD, FRCSC⁴; Damien Bolton, MD, FRACS⁵; B. Thomas Brown, MD, MBA, FACS⁶; Alexis Te, MD⁷; Peter Chin, MBBS, FRACS⁸; Daniel Rukstalis, MD⁹; Claus Roehrborn, MD, FACS¹⁰

1: Southern Illinois University School of Medicine, Springfield, Illinois; 2: Western Urological Clinic, Salt Lake City, Utah; 3: Carolina Urological Research Center, Myrtle Beach, South Carolina; 4: Cosmetic Surgery Hospital, Brampton, Ontario, Canada; 5: The Austin Hospital, Melbourne, Victoria, Australia; 6: Atlantic Urological Associates, Daytona Beach, Florida; 7: Weill Cornell Medical Center, New York, New York; 8: Figtree Private Hospital, Figtree, New South Wales, Australia; 9: Wake Forest University, Winston-Salem, North Carolina; 10: The University of Texas Southwestern Medical Center, Dallas, Texas

121 EFFECTS OF THE ONCE DAILY CO ADMINISTRATION OF TADALAFIL WITH FINASTERIDE FOR 6 MONTHS IN MEN WITH LOWER URINARY TRACT SYMPTOMS AND PROSTATIC ENLARGEMENT SECONDARY TO BENIGN PROSTATIC HYPERPLASIA

Hartwig Büttner, MD¹; Claus Roehrborn, MD²; Sidney Glina, MD³; Adil Esen, MD⁴; Ketan Kapadia, MD⁵; Carsten Hennes, PhD⁶; David Wong, MD⁷; Sebastian Sorsaburu, MD⁷; Lars Viktrup, MD, PhD⁷

1: Eli Lilly Biomedicines BU, Lilly Deutschland GmbH, Bad Homburg, Germany; 2: University of Texas Southwestern Medical Center, Dallas, Texas, USA; 3: Instituto H. Ellis and Department of Urology, Ipiranga Hospital, Sao Paulo, Brazil; 4: Urology Department, Dokuz Eylul University Medical Faculty, Dokuz Eylul University, Konak, Turkey; 5: Urology Specialists of West Florida, St. Petersburg, Florida, USA; 6: EU Statistics, Lilly Deutschland GmbH, Bad Homburg, Germany; 7: Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, Indiana, USA

122 EFFICACY OF TADALAFIL ONCE DAILY FOR TREATMENT OF ERECTILE DYSFUNCTION: THE INFLUENCE OF TESTOSTERONE LEVELS

Evan Goldfischer, MD, MBA¹; Edward Kim, MD²; Allen Seftel, MD³; Simin Baygani, MS⁴; Patrick Burns, PharmD⁴

1: Premier Medical Group of the Hudson Valley, Poughkeepsie, NY; 2: University of Tennessee Graduate School of Medicine, Knoxville, TN; 3: University of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical; 4: Eli Lilly and Co, Indianapolis, IN

123 SATISFACTION WITH TADALAFIL OR TAMSULOSIN ONCE DAILY FOR THE TREATMENT OF LUTS/BPH: TREATMENT SATISFACTION SCALE QUESTIONNAIRE RESULTS FROM A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL

Matthias Oelke, MD¹; Francois Giuliano, MD²; Simin Baygani, MS³; David Cox, PhD³; Angelina Sontag, PhD³

1: Department of Urology, Hannover Medical School, Hannover, Germany; 2: Neuro-Urology-Andrology, R Poincaré Hospital, Garches, Versailles Saint Quentin University, France; 3: Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN

124 RANDOMIZED, CONTROLLED STUDY OF THE SAFETY AND EFFICACY OF SILDENAFIL FOR THE TREATMENT OF RECURRENT ISCHEMIC PRIAPISM ASSOCIATED WITH SICKLE CELL DISEASE

Arthur L. Burnett, MD, MBA¹; Uzoma Anele, MD¹; Irene N. Trueheart, RN¹; Jordan D. Dimitrakoff, MD, PhD¹; James F. Casella, MD²

1: Johns Hopkins Brady Urological Institute, Department of Urology, Baltimore, MD; 2: Johns Hopkins Children's Center, Division of Pediatric Hematology, Baltimore, MD

125 ERECTOGENIC EFFECT OF AVANAFIL WITHIN 15 MINUTES OF DOSING IN MEN WITH MILD TO SEVERE ERECTILE DYSFUNCTION

Irwin Goldstein, MD¹; Laurence H. Belkoff, DO²; Karen DiDonato, RN, MSN³; Winnie Shih, BS³

1: Sexual Medicine, Alvarado Hospital, San Diego, CA; 2: Urologic Consultants of Southeastern Pennsylvania, Bala Cynwyd, PA; 3: VIVUS, Inc., Mountain View, CA

126 EFFICACY OF AS NEEDED PDE5 INHIBITOR THERAPY VS. TADALAFIL ONCE DAILY ON IMPROVEMENT IN ERECTILE DYSFUNCTION

Edward Kim, MD¹; Allen Seftel, MD²; Evan Goldfischer, MD³; Simin Baygani, MS⁴; Patrick Burns, PharmD⁴

1: University of Tennessee Graduate School of Medicine, Knoxville, TN; 2: Univ. of Medicine and Dentistry of New Jersey/Robert Wood Johnson Medical School; 3: Premier Medical Group of the Hudson Valley; 4: Eli Lilly and Co, Indianapolis, IN

127 AN INVESTIGATION ON CURRENT STATUS AND PUBLIC AWARENESS FOR COUNTERFEIT PHOSPHODIESTERASE TYPE 5 INHIBITORS IN KOREA

Sang-Kuk Yang, MD, PhD¹; Sung Won Lee, MD, PhD²; Dae Yul Yang, MD, PhD³; Sae Woong Kim, MD, PhD⁴; Du Geon Moon, MD, PhD⁵; Soo Woong Kim, MD, PhD⁶; Hwancheol Son, MD, PhD⁶; Kweon Sik Min, MD, PhD⁷; Ki Hak Moon, MD, PhD⁸; Hyun Jun Park, MD, PhD⁹; Jae Seog Hyun, MD, PhD¹⁰

1: Konkuk University Chungju Hospital, Chungju, Korea; 2: Department of Urology, College of Medicine, Sungkyunkwan University, Seoul, Korea; 3: Department of Urology, College of Medicine, Hallym University, Chuncheon, Korea; 4: Department of Urology, College of Medicine, Catholic University, Seoul, Korea; 5: Department of Urology, College of Medicine, Korea University, Seoul, Korea; 6: Department of Urology, College of Medicine, Seoul National University, Seoul, Korea; 7: Department of Urology, College of Medicine, Inje University, Busan, Korea; 8: Department of Urology, College of Medicine, Yeungnam University, Daegu, Korea; 9: Department of Urology, College of Medicine, Pusan National University, Busan, Korea; 10: Department of Urology, College of Medicine, Gyeongsang National University, Jinju, Korea

128 ROLE OF NOCTURNAL PENILE TUMESCENCE AND RIGIDITY IN RESPONSE TO DAILY SILDENAFIL IN PATIENTS WITH ERECTILE DYSFUNCTION DUE TO PELVIC FRACTURE URETHRAL DISRUPTION: A SINGLE-CENTER EXPERIENCE

Jing Peng, MD¹; Zhichao Zhang, MD¹; Yiming Yuan, MD¹

1: Peking University First Hospital, Beijing, China

129 EFFECTS OF DEODORANT AND ANTIPERSPIRANT USE AND THE ABSENCE OF HAIR ON THE ABSORPTION OF TESTOSTERONE 2% SOLUTION APPLIED TO THE AXILLAE

David Small¹; Xiao Ni¹; Paula Polzer¹; Richard Vart¹; Darlene Satonin¹; Malcolm Mitchell¹

1: Eli Lilly and Company, Indianapolis, IN

130 CHANGE IN SEXUAL FUNCTION IN MEN WITH LUTS/BPH ASSOCIATED WITH LONG-TERM TREATMENT WITH DOXAZOSIN, FINASTERIDE, AND COMBINED THERAPY

Kevin McVary, MD, FACS¹; Charles Welliver, MD¹; Tobias Kohler, MD, MPH, FACS¹

1: SIU School of Medicine, Springfield, IL

131 EFFICACY OF TADALAFIL ONCE DAILY IN MEN WITH ERECTILE DYSFUNCTION: AN INTEGRATED ANALYSIS OF DATA OBTAINED FROM 1,913 PATIENTS FROM 6 RANDOMIZED, DOUBLE BLIND, PLACEBO CONTROLLED CLINICAL STUDIES

Hartmut Porst¹; Mauro Gacci, Dr.²; Hartwig Büttner, Dr.³; Carsten Henneges⁴; Frank G. Boess, Dr.⁵

1: Private Practice of Urology, Germany; 2: Department of Urology, University of Florence, Careggi Hospital, Florence, Italy; 3: Eli Lilly Biomedicine BU – Men's Health Therapeutic Area Europe, c/o Lilly Deutschland GmbH; 4: Global Statistical Sciences, Lilly Deutschland GmbH, Bad Homburg, Germany; 5: Lilly Deutschland GmbH, Medical Department, Bad Homburg, Germany

132 IMPROVEMENT IN PENILE CURVATURE AND PLAQUE VOLUME AFTER INTRALESIONAL VERAPAMIL THERAPY AS A FUNCTION OF PEYRONIE'S DISEASE SEVERITY

Michael A. Brooks, MD¹; Alexander W. Pastuszak, MD, PhD¹; Saneal Rajanahally²; Mohit Khera, MD¹; Larry I. Lipshultz, MD¹

1: Baylor College of Medicine, Houston, TX; 2: Baylor College of Medicine

133 MODIFICATION OF THE INVANCE MALE SLING PROCEDURE: TREATMENT OF STRESS INCONTINENCE AFTER RADICAL PROSTATECTOMY

Richard Cotran¹; Marc Bienz¹; Ilja Aleksic¹; Vladimir Mouraviev, MD¹; Bashar Omarbasha, MD¹

1: Associated Medical Professionals, Syracuse, NY

134 NEUROPHYSIOLOGIC TESTING IN MEN COMPLAINING OF PENILE SEANTION LOSS AFTER FINASTERIDE USE FOR HAIR LOSS

John Sullivan, MD¹; Kelly Park, MD¹; Joseph Narus, NP¹; John Mulhall, MD¹

1: MSKCC, NY, NY

135 THE AROMATASE INHIBITOR (AI) ANASTRAZOLE (AZ) INCREASES THE DURATION OF THERAPEUTIC TESTOSTERONE (T) LEVELS AFTER TESTOSTERONE PELLET (TP) INSERTIONS: A RETROSPECTIVE LONGITUDINAL STUDY

Clay Mechlin, MD, MS¹; Andrew McCullough, MD²

1: Urology Associates of Central Missouri, Columbia, MO; 2: Albany Medical College, Albany, NY

136 THE EFFECT OF CLOMIPHENE CITRATE ON INFERTILE MALES

Ella Doerge, MD¹; Jake Fantus, MD¹; Ryan Smith, MD¹; Jason Kovac, MD, PhD¹; Matt Coward, MD¹; Larry Lipshultz, MD¹

1: Baylor College of Medicine

4:15 pm - 5:45 pm

Session XVI B - Concurrent Moderated Posters

Poster Session VIII - Implant Part II

Location: Acadian Room

Moderators: Culley C. Carson III, MD

Rafael E. Carrion, MD

137 THE MINIMALLY INVASIVE, NO-TOUCH ("MINT") TECHNIQUE FOR PENILE IMPLANT SURGERY

Darren Katz, MBBS¹; Christopher Love, MBBS¹

1: Centre for Specialist Men's Health and Fertility, Melbourne, Australia

138 OUTCOMES OF ABDOMINAL WALL RESERVOIR PLACEMENT IN INFLATABLE PENILE PROSTHESIS IMPLANTATION: A SAFE AND EFFICACIOUS ALTERNATIVE TO THE SPACE OF RETZIUS

Doron S. Stember, MD¹; Bruce B. Garber, MD²; Paul E. Perito, MD³

1: Beth Israel Medical Center of Albert Einstein College of Medicine, New York, NY; 2: Hahnemann University Hospital, Philadelphia, PA; 3: Perito Urology, Coral Gables, FL

139 INFLATABLE PENILE PROSTHESIS IMPLANTATION IN MEN UNDER 30: LONG-TERM OUTCOMES REGARDING PATIENT SATISFACTION

Martin Gross, MD¹; Ricardo Munarriz, MD¹

1: Boston University Medical Center, Boston, MA

140 MEASURES TO IMPROVE INFECTION CONTROL IN PROSTHETICS SURGERY

Michael H. Johnson, MD¹; Marshall Strother, BS¹; Arnold D. Bullock, MD¹

1: Washington University School of Medicine, Saint Louis, Missouri

141 IATROGENIC URETHRAL INJURY DURING PLACEMENT OF PENILE PROSTHESIS, IS IT TRULY AN INDICATION TO ABORT?

Daniel Martinez, MD¹; Justin Parker, MD¹; Tariq Hakky, MD¹; Rafael Carrion, MD¹

1: University of South Florida, Tampa, FL

142 INITIAL TWO YEAR EXPERIENCE WITH HIGH SUBMUSCULAR PLACEMENT OF INFLATABLE PENILE PROSTHESIS RESERVOIRS

Allen F. Morey, MD¹; J. Francis Scott, BA¹; Jay Simhan, MD¹; Timothy J. Tausch, MD¹

1: UT Southwestern Medical Center, Dallas, Texas

143 ECTOPIC RESERVOIR PLACEMENT DOES NOT INCREASE RISK OF IPP COMPLICATIONS

Luke Frederick, MD¹; Charles Welliver, MD¹; Tobias S. Köhler, MD¹

1: Division of Urology, Southern Illinois University School of Medicine, Springfield, Illinois

144 INCREASE IN AVERAGE AGE OF INFLATABLE PENILE PROTHESIS RECIPIENTS OVER THE PAST 13 YEARS

Peter J. Stahl¹; Doron S. Stember, MD²

1: Columbia University College of Physicians and Surgeons, New York, NY; 2: Beth Israel Medical Center of Albert Einstein College of Medicine, New York, NY

145 THE CARRION CAST: AN INTRACORPORAL ANTIMICROBIAL SPACER MADE OF CASO4 USED TO BRIDGE THE GAP BETWEEN EXPLANTATION OF INFECTED PENILE PROSTHESIS AND DELAYED REIMPLANTATION

Daniel Martinez, MD¹; Eihab Alhammali¹; Justin Parker, MD¹; Tariq Hakky, MD¹; Rafael Carrion, MD¹

1: University of South Florida, Tampa, FL

146 PERINEAL MINIMALLY INVASIVE TECHNIQUE FOR CYLINDER LENGTH ADJUSTMENTSeth D. Cohen, MD, MPH¹; Jean Francois Eid, MD¹*1: Lenox Hill Hospital, NY, NY***147 HIGH SUBMUSCULAR VERSUS SPACE OF RETZIUS PLACEMENT OF IPP RESERVOIRS: WHAT ARE SURGEONS SAYING?**Timothy J. Tausch, MD¹; J. Francis Scott, BA¹; James R. Flemons, BBA²; Jay Simhan, MD¹; Steven K. Wilson, MD³; Allen F. Morey, MD¹*1: University of Texas Southwestern Medical Center, Dallas, Texas; 2: Coloplast Surgical Urology, Dallas, Texas; 3: Institute of Urologic Excellence, Indio, California***148 INFLATABLE PENILE PROSTHESIS TECHNIQUE AND OUTCOMES AFTER RADIAL FOREARM FREE FLAP NEOPHALLOPLASTY**Robert Segal, MD, FRCS(C)¹; Eric Massanyi, MD²; Angela Gupta, MD²; John Gearhart, MD²; Richard Redett, MD²; Trinity Bivalacqua, MD, PhD²; Arthur Burnett, MD, MBA²*1: Chesapeake Urology Associates, Baltimore, MD; 2: Johns Hopkins Medical Institutions, Baltimore, MD***149 EXTERNAL TRACTION THERAPY FOR PENILE LENGTH RECOVERY PRIOR TO PROSTHESIS REPLACEMENT- A PROOF OF CONCEPT STUDY**Benjamin Sherer, MD¹; Laurence Levine, MD¹*1: Rush University Medical Center, Chicago, IL***150 HIGH PATIENT SATISFACTION OF INFLATABLE PENILE PROSTHESIS WITH SYNCHRONOUS PPLICATION FOR CORRECTION OF PEYRONIE'S DISEASE WITH ERECTILE DYSFUNCTION**Paul H. Chung, MD¹; Lee C. Zhao, MD¹; Jay Simhan, MD¹; Timothy J. Tausch, MD¹; J. Francis Scott, BA¹; Allen F. Morey, MD¹*1: UT Southwestern Medical Center, Dallas, Texas***151 CORPOROTOMY PLUG TECHNIQUE IN THE MANAGEMENT OF PROXIMAL CORPORAL PERFORATION DURING REVISION PENILE PROSTHESIS SURGERY**Tariq Hakky, MD¹; Justin Emtage, MD¹; Anthony Park, MD¹; Daniel Martinez, MD¹; Rafael E. Carrion, MD¹; Justin Parker, MD¹*1: Tampa, FL***152 EFFICACY OF PENILE TRACTION THERAPY AMONG PATIENTS UNDERGOING INTRALESIONAL INTERFERON TREATMENT FOR PEYRONIE'S DISEASE**Landon Trost, MD¹; Taylor Peak, MD²; Prem Sant Sangkum, PhD²; Ronny Tan, MD²; Suresh Sikka, PhD²; Wayne Hellstrom, MD, FACS²*1: Mayo Clinic, Rochester, MN; 2: Tulane University, New Orleans, LA***153 TRENDS IN SURGICAL APPROACH OF PENILE PROTHESIS SURGERY OVER THE PAST 13 YEARS**Doron S. Stember, MD¹; Paul E. Perito, MD²; Peter J. Stahl³*1: Beth Israel Medical Center of Albert Einstein College of Medicine, New York, NY; 2: Perito Urology, Coral Gables, FL; 3: Columbia University College of Physicians and Surgeons, New York, NY***154 SHORTENED PENIS POST PENILE PROSTHESIS IMPLANTATION TREATED WITH SUBCUTANEOUS SOFT SILICONE PENILE IMPLANT: CASE STUDY**Vaheh Shirvanian, MD¹; Gottfried Lemperle, MD, PhD²; Carlos Araujo Pinto, MD³; James Elist, MD, FACS⁴*1: Johann Wolfgang Goethe University, Frankfurt am Main, Germany; 2: Division of Plastic Surgery University of California San Diego, San Diego; 3: Instituto Paulista Tratamento Disfuncao Eretil, Sao Paulo, Brazil; 4: Attending Staff, Cedars Sinai Medical Center, Los Angeles, CA*

SCIENTIFIC PROGRAM

Sunday November 24, 2013

7:30 am - 10:00 am

Registration/Information Desk Open

Location: Foyer Floor 1

8:00 am - 9:00 am

Session XVII - Concurrent Moderated Posters

Poster Session IX - Female Sexual Dysfunction and Sexual Psychology

Location: Vieux Carré B Room

Moderators: Andrew T. Goldstein, MD, IF

Sharon Parish, MD, IF

155 PATIENT SATISFACTION WITH TESTOSTERONE REPLACEMENT THERAPIES: THE REASONS BEHIND THE CHOICES

Jason Kovac, MD, PhD¹; Saneal Rajanahally¹; Ryan Smith¹; Robert Coward¹; Dolores Lamb¹; Larry Lipshultz¹

1: Baylor College of Medicine

156 FEMALE SEXUAL FUNCTION AND DEPRESSION DURING PREGNANCY – PRELIMINARY RESULTS

Meireluci Costa Ribeiro¹; Mary Uchiyama Nakamura, MD, PhD Professor¹; Maria Regina Torloni, MD, PhD²; Marco de Tubino Scanavino, MD, PhD³; Rosiane Mattar, MD, PhD, Professor¹

1: Department of Obstetrics, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 2: Internal Medicine Department, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 3: Department and Institute of Psychiatry, University of São Paulo Medical School (FMUSP), São Paulo, Brazil

157 EMBARRASSMENT AND ALTERED BODY IMAGE IN HYPOGONADAL MEN ON TESTOSTERONE REPLACEMENT THERAPY (TRT)

Saneal Rajanahally¹; Jason Kovac, MD, PhD¹; Ryan Smith¹; Robert Coward¹; Dolores Lamb¹; Larry Lipshultz¹

1: Baylor College of Medicine

158 PREVALENCE OF SEXUAL OFFENDERS TREATED FOR ERECTILE DYSFUNCTION AT A SINGLE INSTITUTION: ETHICAL CONSIDERATIONS

Archana Rajender¹; Elizabeth Phillips, MD²; Ricardo Munarriz, MD²

1: Boston University School of Medicine, Boston, MA; 2: Boston Medical Center, Boston, MA

159 EFFICACY OF SUBCUTANEOUS BREMELANOTIDE SELF-ADMINISTERED AT HOME BY PREMENOPAUSAL WOMEN WITH FEMALE SEXUAL DYSFUNCTION: A PLACEBO-CONTROLLED DOSE-RANGING STUDY

Stanley Althof, PhD¹; Anita Clayton, MD²; Robert Jordan³; Jeffrey Edelson, MD³; Sally Greenberg, PhD⁴; Leonard DeRogatis, PhD⁵; Sheryl Kingsberg, PhD⁶; Raymond Rosen, PhD⁷; David Portman, MD⁸; Michael Krychman, MD⁹

1: Center for Marital and Sexual Health of South Florida, FL; 2: University of Virginia, Charlottesville, VA; 3: Palatin Technologies, Inc., Cranbury, NJ; 4: S. Greenberg Statistical Consulting Inc., Berkeley, CA; 5: Johns Hopkins University School of Medicine, Lutherville, MD; 6: University Hospitals Case Medical Center, Cleveland, OH; 7: New England Research Institutes, Inc., Watertown, MA; 8: Columbus Center for Women's Health Research, Columbus, OH; 9: Southern California Center for Sexual Health and Survivorship Medicine, Newport Beach, CA

161 EXPLORING THE ROLE OF THE PARTNER IN COUPLES' SEXUAL RECOVERY AFTER SURGERY FOR PROSTATE CANCER

Daniela Wittmann, PhD, MSW¹; Barbara Given, PhD, RN²; Ted Skolarus, MD, MS³; Jim Montie, MD¹

1: Department of Urology, University of Michigan; 2: College of Nursing, Michigan State University; 3: VA Ann Arbor Healthcare System, HSRD Center for Clinical Management Research

162 SEXUAL FUNCTION AND QUALITY OF LIFE OF BRAZILIAN PREGNANT WOMEN – PRELIMINARY RESULTS

Meireluci Costa Ribeiro¹; Mary Uchiyama Nakamura, MD, PhD, Professor¹; Maria Regina Torloni, MD, PhD²; Marco de Tubino Scanavino, MD, PhD³; Pedro Eduardo Mancini, Medical Student⁴; Rosiane Mattar, MD, PhD, Professor¹

1: Department of Obstetrics, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 2: Internal Medicine Department, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 3: Department and Institute of Psychiatry, University of São Paulo Medical School (FMUSP), São Paulo, Brazil; 4: São Paulo Federal University (UNIFESP), São Paulo, Brazil

163 IMPACT OF OVERWEIGHT ON THE SEXUAL FUNCTION OF PREGNANT WOMEN – PRELIMINARY RESULTS

Meireluci Costa Ribeiro¹; Mary Uchiyama Nakamura, MD, PhD, Professor¹; Maria Regina Torloni, MD, PhD²; Marco de Tubino Scanavino, MD, PhD³; Bruna Maria Bernardi Forte, Medical Student⁴; Rosiane Mattar, MD, PhD, Professor¹

1: Department of Obstetrics, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 2: Internal Medicine Department, São Paulo Federal University (UNIFESP), São Paulo, Brazil; 3: Department and Institute of Psychiatry, University of São Paulo Medical School (FMUSP), São Paulo, Brazil; 4: São Paulo Federal University (UNIFESP), São Paulo, Brazil

164 EFFICACY AND SAFETY OF PENILE GIRTH ENHANCEMENT BY TWO-STAGE AUTOLOGOUS FAT INJECTION (TAFI) OPERATION

Seung Wook Lee, MD¹; Dong Hyuk Kang, MD²; Joo Yong Lee, MD, PhD³; Jae Hoon Chung, MD¹; Jung Ki Jo, MD¹; Yong Jin Kim, MD⁴; Haeng Nam Lee, MD⁴; Seung Hoon Cho, MD⁴; Taek Hee Chang, MD⁴; Kang Su Cho, MD, PhD³; Hae Young Park, MD, PhD¹

1: Department of Urology, Hanyang University College of Medicine, Seoul, Korea; 2: National Forensic Hospital, Gongju, Korea; 3: Department of Urology, Urological Science Institute, Yonsei University College of Medicine, Seoul, Korea; 4: Gilman Urology Clinic, Seoul, Korea

165 HYPOACTIVE SEXUAL DESIRE DISORDER (HSDD) IN MEN: INTERVIEW CHARACTERISTICS AND CORRELATION WITH DESIRE SCALES IN HSDD POSITIVE AND NEGATIVE MALES.

Leonard DeRogatis, PhD¹; Raymond Rosen, PhD²; Krista Barbour, PhD³; James Symons, PhD³

1: Maryland Center for Sexual Health; 2: New England Research Institute, Watertown, MA; 3: Sprout Pharmaceuticals, Inc.

166 SUBSTANCE USE AND SEXUAL FUNCTION IN INFERTILE MALES: PREVALENCE AND CORRELATES OF DYSFUNCTION

Helen R. Levey, DO, MPH¹; Marguerite Thomer, MD¹; Claudia Berrondo, MD¹; Justin Budnik, BS, BA¹; Changyong Feng, PhD¹; Jeanne O'Brien, MD¹

1: Rochester, NY

8:00 am - 9:00 am

Session XVII - Concurrent Moderated Posters

Poster Session X - Post-Prostatectomy

Location: Vieux Carré A Room

Moderators: Gerald Brock, MD, FRCS

Anthony J. Bella, MD

167 DETERMINING SEXUAL AND URINARY FUNCTION AFTER ORGAN-SPARING SURGERY FOR PENILE CANCER USING VALIDATED QUESTIONNAIRES

Kyle Scarberry, MD¹; Kenneth Angermeier, MD²; Drogo Montague, MD²; Steven Campbell, MD, PhD²; Hadley Wood, MD²

1: University Hospitals Case Medical Center, Cleveland, Ohio;

2: Glickman Urological and Kidney Institute, Cleveland Clinic, Cleveland, Ohio

168 EFFECTS OF TADALAFIL (TAD) TREATMENT ON ERECTILE FUNCTION (EF) RECOVERY POST BILATERAL NERVE-SPARING RADICAL PROSTATECTOMY (NSRP)

John Mulhall¹; Gerald Brock²; Francesco Montorsi³; Jens-Uwe Stolzenburg⁴; Ignacio Moncada⁵; Hiten Patel⁶; Daniel Chevallier⁷; Kazimierz Krajka⁸; Carsten Henneges⁹; Ruth Dickson¹⁰; Hartwig Büttner⁹

1: Memorial Sloan-Kettering Cancer Center, New York, USA; 2: University of Western Ontario, London, Ontario, Canada; 3: Vita Salute San Raffaele University, Milan, Italy; 4: Universitätsklinikum Leipzig, Leipzig, Germany; 5: Hospital La Zarzuela, Madrid, Spain; 6: University Hospital North Norway, Tromsø, Norway; 7: Hôpital Universitaire Archet 2, Nice, France; 8: Uniwersyteckie Centrum Kliniczne, Gdansk, Poland; 9: Lilly Deutschland GmbH, Bad Homburg, Germany; 10: Lilly Canada Inc, Toronto, Ontario, Canada

169 ACCEPTANCE AND COMMITMENT THERAPY (ACT) FOR ADHERENCE TO AN ERECTILE REHABILITATION PROGRAM (ERP) AFTER RADICAL PROSTATECTOMY (RP)

Christian Nelson, PhD¹; Joslyn Kenowitz, BA¹; John Mulhall, MD¹

1: Memorial Sloan-Kettering Cancer Center, New York, NY

170 UROLOGIC TREATMENT OUTCOMES OF RECURRENT BLADDER NECK CONTRACTURE AND URETHRAL STRICTURES AFTER RADIATION FOR PROSTATE CANCER

Sarah Fraumann, MD¹; Melissa Kaufman¹; Roger Dmochowski¹; Doug Milam¹

1: Vanderbilt University Medical Center, Nashville, TN

171 DETERMINING THE EFFECTS OF RADICAL PROSTATECTOMY ON PENILE LENGTH BY COMPARING OBJECTIVE SURGICAL PARAMETERS OF 45,536 PATIENTS WHO UNDERWENT PENILE PROSTHESES INSERTIONS.

King Chien Joe Lee, MBBS, MRCS, MMED, FAMS¹; Ling De Young, MD, MSc²; Gerald Brock, MD, FRCS²

1: National University Hospital, Singapore; 2: St Joseph Hospital, University of Western Ontario, London, Canada

172 EVALUATION OF NOCTURNAL TUMESCENCE AND ITS RESPONSE TO NIGHTLY SILDENAFIL CITRATE DURING ACUTE RECOVERY FOLLOWING RADICAL PROSTATECTOMY: A RANDOMIZED, DOUBLE BLIND, PLACEBO-CONTROLLED STUDY

Dorota J. Hawksworth, MD, MBA¹; Daniel J. Kim, MD²; Judith A. Travis, RN³; Jennifer Cullen, PhD, MPH³; Lauren Hurwitz, MHS³; Inger L. Rosner, MD²; Tom F. Lue, MD⁴; Robert C. Dean, MD²

1: Department of Urology, Fort Belvoir Community Hospital, Fort Belvoir, VA; 2: Department of Urology, Walter Reed National Military Medical Center, Bethesda, MD; 3: Center for Prostate Cancer Disease Research, Rockville, MD; 4: Department of Urology, UCSF Medical Center, San Francisco, CA

173 NOCTURNAL PENILE TUMESCENCE PRESERVATION WITH NIGHTLY LOW-DOSE SILDENAFIL 6 WEEKS AFTER NERVE-SPARING RADICAL PROSTATECTOMY

Andreas Bannowsky, MD, FECSM¹; Heiko Schulze, MD²; Klaus-Peter Juenemann, Prof, MD²

1: Dept. of Urology, Klinikum Osnabrueck, Germany; 2: Dept. of Urology, University Hospital Schleswig-Holstein, Campus Kiel, Germany

174 COUPLES' SEXUAL RECOVERY TRAJECTORY DURING THE FIRST TWO YEARS AFTER SURGERY FOR PROSTATE CANCER: CHANGE IN SEXUAL FUNCTION, SEXUAL SATISFACTION, AND DYADIC SATISFACTION

Daniela Wittmann, PhD, MSW¹; Brady West, PhD²; Barbara Given, PhD, RN³; Ted Skolarus, MD, MS¹; Lawrence An, MD⁴; Patricia Clark, MSN⁴; Ganesh Palapattu, MD¹; Jim Montie, MD¹

1: Department of Urology, University of Michigan; 2: Center for Statistical Consultation and Research, University of Michigan; 3: College of Nursing, Michigan State University; 4: Center for Healthcare Communication Research, University of Michigan

175 A SINGLE INSTITUTION'S UTILITY OF USING PENILE DOPPLER ULTRASOUND TO EVALUATE ERECTILE DYSFUNCTION IN PATIENTS WITH PROSTATE CANCER

Zachary Klaassen, MD¹; Carolyn Cutler¹; Andrew Ostrowski¹; Qiang Li, MD, PhD¹; Patrick J. Fox, MD¹; Brittani Barrett¹; Rabii Madi, MD¹; Martha K. Terris, MD¹; Kelvin A. Moses, MD, PhD¹; Ronald W. Lewis, MD¹

1: Medical College of Georgia - Georgia Regents University, Augusta, GA

176 MINIMALLY INVASIVE ABLATIVE THERAPY (MIAT): POTENCY RATES IN FOCAL AND TOTAL CRYOSURGERY WITH PRE-OPERATIVE MRI PATIENT OPTIMIZATION AND PENILE REHABILITATION IN PROSTATE CANCER

Altan Ilkay, MD¹

1: Suny-Stony Brook, Stony Brook, New York, NY

177 PREDICTIVE FACTORS FOR RETURN OF ERECTILE FUNCTION IN ROBOTIC RADICAL PROSTATECTOMY: CASE SERIES FROM A SINGLE CENTRE.

Francisco Garcia, MD, BSc, FRCSC¹; Philippe Violette, MD, FRCSC¹; Gerald Brock, MD, FRCSC¹; Stephen Pautler, MD, FRCSC¹

1: St. Joseph's Health Care London, London, Ontario

178 LONG-TERM OUTCOMES AND POTENTIAL RISK FACTORS OF ARTIFICIAL URINARY SPHINCTER PLACEMENT FOR URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY: A SINGLE SURGEON, SINGLE CENTER EXPERIENCE

Ahmet Gokce¹; Victor Sandoval¹; Ronny B.W. Tan¹; Wayne J. Hellstrom¹

1: Tulane University School of Medicine, Department of Urology, New Orleans, LA

8:00 am - 9:00 am

Session XVII - Concurrent Moderated Posters

Poster Session XI - Hypogonadism Part II

Location: Pontalba Room

Moderators: Nelson Bennett Jr., MD

Tobias Kohler, MD, MPH

179 COMPARISON OF SATISFACTION AND EFFICACY IN HYPOGONADAL MEN ON DIFFERENT TESTOSTERONE SUPPLEMENTATION REGIMENS

Ranjith Ramasamy¹; Jason M. Scovell¹; Jason R. Kovac¹; Dolores J. Lamb¹; Larry I. Lipshultz¹

1: Department of Urology, Baylor College of Medicine, Houston, TX

180 SERUM HORMONES AS PREDICTORS OF SYMPTOM RESPONSE IN HYPOGONADAL (HG) MEN ON TRANSDERMAL TESTOSTERONE (TDT)

Clarisse Mazzola, MD¹; Boback Berookhim, MD, MBA¹; Oluyemi Akin-Olugbade, MD¹; Serkan Deveci, MD¹; John Mulhall, MD¹

1: New York, NY

181 RELATIONSHIP BETWEEN VARICOCELE (VX) GRADE AND SERUM TOTAL TESTOSTERONE (TT) LEVELS IN OLDER MEN

Patrick Teloken, MD¹; Boback Berookhim, MD, MBA¹; Nina Logmanieh, MD¹; Byron Alex, MD¹; John Mulhall, MD¹

1: New York, NY

182 USE OF ANASTROZOLE (AZ) FOR MALE HYPOGONADISM (MHG) IN UROLOGIC PRACTICE

Clay Mechlin, MD, MS¹; Andrew McCullough, MD²

1: Urology Associates of Central Missouri, Columbia, MO; 2: Albany Medical College, Albany, NY

183 DOSE TITRATION AND SERUM TESTOSTERONE LEVEL ASSESSMENTS IN PATIENTS TREATED WITH TOPICAL TESTOSTERONE

David Muram, MD¹; Anna Kaltenboeck, MA²; Natalie Boytsov, PhD¹; Alexandra San Roman, BA³; Eleanor Hayes-Larson, MPH²; Jasmina Ivanova, MA²; Howard Birnbaum, PhD³; Ralph Swindle, PhD¹

1: Eli Lilly and Co., Indianapolis, IN; 2: Analysis Group, Inc., New York, NY; 3: Analysis Group, Inc., Boston MA

184 ERECTILE FUNCTION, PDE-5 USE AND SEXUAL DESIRE IN A LARGE COHORT OF UNTREATED HYPOGONADAL MEN: BASELINE FINDINGS FROM THE REGISTRY OF HYPOGONADISM IN MEN (RHYME)

Raymond C. Rosen, PhD¹; Javier Romero-Otero, MD²; Juan Ignacio Martinez-Salamanca, MD³; Cobi Reisman, MD⁴; Edoardo Pescatori, MD⁵; Hartmut Porst, MD⁶; Andre B. Araujo, PhD¹

1: New England Research Institutes, Inc., Watertown, MA; 2: Hospital Universitario 12 Octubre, Madrid, Spain; 3: Hospital Universitario Puerta de Hierro-Majadahonda, Madrid, Spain; 4: Amstelland Hospital, Amstelveen, The Netherlands; 5: Hesperia Hospital, Modena, Italy; 6: Private Practice of Urology and Andrology, Hamburg, Germany

185 REAL-WORLD EXPERIENCE WITH TESTOSTERONE PELLETS FOR TESTOSTERONE DEFICIENCY SYNDROME (TDS)

Kiranpreet Khurana, MD¹; Daniel Shoskes¹

1: Cleveland Clinic, Cleveland, OH

186 CHANGES IN TESTOSTERONE LEVELS AMONG HYPOGONADAL MEN WITH AND WITHOUT TYPE 2 DIABETES IN A US HEALTH SYSTEM

Emily Shortridge¹; Paula Polzer¹; Prina Donga²; Seth Goodman³; Christopher Blanchette⁴; Chakkarin Burudpakdee²; Brett Carswell⁵

1: Eli Lilly and Company, Indianapolis, IN; 2: IMS Health, Plymouth Meeting, PA; 3: IMS Health, Waltham, MA; 4: IMS Health, Alexandria, VA; 5: Reliant Health System, Worcester, MA

187 ORAL ENCLOMID (ANDROXAL) RAISES FREE AND TOTAL SERUM TESTOSTERONE IN HYPOGONADAL MEN AND DOES NOT LOWER SPERM COUNTS: COMPARISON WITH A TOPICAL GEL

Gregory Fontenot, PhD¹; Ronald Wiehle, BS, PhD¹; Joseph Podolski, BS¹

1: Repros Therapeutics

188 THE AROMATASE INHIBITOR (AI) ANASTRAZOLE (AZ) MINIMIZES GONADOTROPIN (GT) SUPPRESSION BY LONG ACTING TESTOSTERONE PELLETS (TP): AN OBSERVATIONAL RETROSPECTIVE STUDY.

Clay Mechlin, MD, MS¹; Andrew McCullough, MD²

1: Urology Associates of Central Missouri, Columbia, MO; 2: Albany Medical College, Albany, NY

189 HYPOGONADISM IS ASSOCIATED WITH INCREASED PENILE CORPORAL HYPOXIA.

Clay Mechlin, MD, MS¹; Chuck Welliver, MD²; Andrew McCullough, MD³

1: Urology Associates of Central Missouri, Columbia, MO; 2: Southern Illinois University, Springfield, IL; 3: Albany Medical College, Albany, NY

190 A PILOT PROSPECTIVE STUDY ON THE EFFECT OF IMPLANTABLE TESTOSTERONE REPLACEMENT ON PENILE OXIMETRY AND SEXUAL FUNCTION

Charles Welliver, MD¹; Zachary Testo²; Jason Frankel, MD³; Joseph Alukal, MD⁴; Clay Mechlin, MD⁵; Andrew McCullough, MD²

1: Southern Illinois University, Springfield, Illinois; 2: Albany Medical College, Albany, NY; 3: University of Connecticut, Farmington, Connecticut; 4: New York University Medical Center, NYC, NY; 5: Urology Associates of Central Missouri, Columbia, MO

9:00 am - 9:10 am

Trainees and Faculty Depart for Surgical Lab

Location: Hotel Lobby

9:00 am - 10:00 am

Session XVIII - In Summary:

Sexual Medicine Take-Home Messages

Location: Cabildo Room

9:00 am - 9:10 am

Basic Science of SD

Johanna Hannan, PhD

9:10 am - 9:20 am

The Hypogonadal Male

Tobias Kohler, MD, MPH

9:20 am - 9:30 am

Peyronie's

William O. Brant, MD

9:30 am - 9:40 am

Pharmacotherapy

Doron S. Stember, MD

9:40 am - 9:50 am

Ejaculation/Orgasm

Alan W. Shindel, MD

9:50 am - 10:00 am

Surgical

Brian S. Christine, MD

10:00 am

Meeting Adjourns

UNMODERATED POSTERS

191 ASSESSING EXPERIENCE AND OUTCOMES WITH COMBINED USE OF PHOSPHODIESTERASE-5 INHIBITORS IN ERECTILE DYSFUNCTION TREATMENT

Pengbo Jiang, BS¹; Emma McCarty, MD²; Jane Ashby, MD³; David Goldmeier, MD⁴; Hossein Sadeghi-Nejad, MD, FACS⁵
 1: Rutgers New Jersey Medical School; 2: Belfast HSC Trust, Belfast, UK; 3: Berkshire NHS Trust, London, UK; 4: Imperial NHS Trust, London, UK; 5: Rutgers New Jersey Medical School and Hackensack University Medical Center, Hackensack, NJ

192 VIBERECT® PENILE VIBRATORY STIMULATION SYSTEM: EVALUATION OF ITS ERECTOGENIC EFFICACY

Robert Segal, MD, FRCS(C)¹; Kambiz Tajkarimi, MD²; Arthur Burnett, MD, MBA³

1: Chesapeake Urology Associates, Baltimore, MD; 2: Frederick Urology Specialists, Frederick, MD; 3: Johns Hopkins Medical Institutions, Baltimore, MD

193 A COMPLICATION OF RECURRENT PENILE INFECTION IN THE PRESENCE OF SYNTHETICALLY RECONSTRUCTED CORPORA CAVERNOSA

Justin B. Emtage, MD¹; Justin Parker, MD¹; Tariq S. Hakky, MD¹; Samuel Lawindy, MD¹; Daniel Martinez, MD¹; Rafael E. Carrion, MD¹

1: University of South Florida Department of Urology, Tampa, FL, USA

194 WHERE IS THE REAR TIP EXTENDER? THE ART OF CORPOROSCOPY FOR REMOVAL OF RETAINED PENILE PROSTHESIS COMPONENTS

Daniel Martinez, MD¹; Justin Parker, MD¹; Tariq Hakky, MD¹; Rafael Carrion, MD¹

1: University of South Florida, Tampa, FL

195 THE MINIMALLY INVASIVE, NO-TOUCH ("MINT") TECHNIQUE FOR PENILE IMPLANT SURGERY

Darren Katz, MBBS¹; Christopher Love, MBBS¹

1: Centre for Specialist Men's Health and Fertility, Melbourne, Australia

196 SUPERFICIAL DORSAL VEIN INJURY/THROMBOSIS PRESENTING AS FALSE PENILE FRACTURE REQUIRING DORSAL VENOUS LIGATION

Arash Rafiei, MD¹; Tariq Hakky, MD¹; Daniel Martinez, MD¹; Justin Parker, MD¹; Rafael Carrion, MD¹

1: University of South Florida, Tampa, FL

197 CAN THE RESULT OF PENILE DOPPLER ULTRASONOGRAPHY PREDICT THE RESPONSE TO PDE-5 INHIBITORS IN PATIENTS WITH ERECTILE DYSFUNCTION?

Hyun Suk Yoon¹; Woo Sik Chung¹

1: Department of Urology Mokdong Hospital Ewha Womans University School of Medicine, Seoul, Korea

198 SCREENING FOR SEX OFFENDERS IN SEXUAL MEDICINE - ETHICAL, LEGAL AND SOCIAL CONSIDERATIONS

Elizabeth Phillips, MD¹; Ashley Brandon, MD¹; Archana Rajender, MS²; Ricardo Munarriz, MD¹

1: Boston Medical Center, Boston, MA; 2: Boston University School of Medicine, Boston, MA

199 SEX ADDICTION: MYTH OR REALITY

Dennis Lin, MD¹; Afton Bergel, MD²; Erika Gerz, MD²

1: New York, NY; 2: Beth Israel Medical Center, New York, NY

200 SEXUAL DYSFUNCTION SYMPTOMS IN BRAZILIAN ADOLESCENTS – PRELIMINARY RESULTS

Mariana Negri, Psychologist¹; Meireluci Costa Ribeiro¹; Ivoneide Aparecida Nohara, Psychologist¹; Patricia Albuquerque Moraes, Nurse¹; Maria Regina Torloni, MD, PhD¹; Eduardo de Souza, MD, PhD¹; Cristina Guazzelli, MD, PhD, Professor¹

1: Department of Obstetrics, São Paulo Federal University (UNIFESP), São Paulo, Brazil

201 SINGLE INCISION VASECTOMY REVERSAL (SIVR)

Ethan Grober, MD, MEd¹; Mary Samplaski, MD¹

1: University of Toronto, Division of Urology, Mount Sinai & Women's College Hospital, Toronto, Ontario, Canada

202 UROLOGIST'S PERCEPTION AND PRACTICE PATTERNS IN PEYRONIE'S DISEASE; A KOREAN NATIONWIDE SURVEY INCLUDING PATIENT'S SATISFACTION

Ki Hak Moon, MD, PhD¹; Sung Won Lee, MD, PhD²; Dae Yul Yang, MD, PhD³; Sae Woong Kim, MD, PhD⁴; Du Geon Moon, MD, PhD⁵; Kwangsung Park, MD, PhD⁶; Hong Seok Shin, MD⁷

1: Yeungnam University; 2: Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea; 3: Department of Urology, College of Medicine, Hallym University, Seoul, Korea; 4: Department of Urology, The Catholic University of Korea College of Medicine, Seoul, Korea; 5: Department of Urology, College of Medicine, Korea University, Seoul, Korea; 6: Department of Urology, Chonnam National University Medical School, Gwangju, Korea; 7: Department of Urology, Catholic University of Daegu School of Medicine

203 PEYRONIE'S DISEASE; TREATMENT OUTCOME IN A SERIES OF 76 MEN PRESENTING FOR OFFICE EVALUATION OF ERECTILE DYSFUNCTION

Mamdouh Mohamid, MD¹; Ahmid Anwar, MD¹

1: *University Minia, Egypt*

204 COMPARISON OF RELATED SYMPTOMS BETWEEN CIRCUMCISED AND UNCIRCUMCISED

Jin Wook Kim, MD, PhD¹; Ji Yoon Chae, MD²; Mi Mi Oh, MD, PhD³; Cheol Yong Yoon, MD, PhD²; Je Jong Kim, MD, PhD³; Du Geon Moon, MD, PhD³

1: *Korea University Guro Hospital*; 2: *Korea University Guro Hospital, Seoul, Republic of Korea*; 3: *Korea University, Seoul, Republic of Korea*

205 FULL BIOCHEMICAL DIAGNOSIS OF HYPOGONADISM AT THE FIRST VISIT INCLUDING LH – EXPERIENCE OF AN ANDROPAUSE CLINIC

Jean Drouin, MD¹; M. Andy¹; G. Berthelot¹; Y. Fortin¹; M.T. Gagnon¹

1: *Clinique d'andropause de Québec*

206 SUBJECTIVE SIDE EFFECTS AND HORMONAL PROFILES IN MEN WITH HYPOGONADISM ON ANASTROZOLE AND CLOMIPHENE THERAPY

Yitzchak Katlowitz¹; Bethany Desroches, BS, MS²; Darren Mack, MD³; Nachum Katlowitz, MD⁴

1: *Staten Island Univ. Hospital Dept of Urology*; 2: *SUNY Downstate School of Medicine Brooklyn, NY*; 3: *SUNY Downstate Department of Urology, Brooklyn, NY*; 4: *Staten Island Univ. Hospital, Staten Island, NY*

207 THE IMPACT OF AN EDUCATIONAL TOOL ON PATIENT CHOICE REGARDING TESTOSTERONE REPLACEMENT THERAPY

Ashley-Denise Mullen, MPAS, MPH, PA-C¹; Todd Doran, MS, PA-C, DFAAPA²; Doug Milam, MD²

1: *Los Angeles, CA*; 2: *Vanderbilt University, Nashville, TN*

208 PREOPERATIVE STAGING OF PROSTATE CANCER: TRANSRECTAL ULTRASOUND (TRUS) IN CORRELATION TO THE EXPERIENCE OF THE UROLOGIST – HOW MUCH IS NEEDED, TO PERFORM A “SAVE” NERVE SPARING RADICAL PROSTATECTOMY?

Andreas Bannowsky, MD, FECSM¹; Isis Vollmer, MD¹; Alexandra Raileanu, MD¹; Hermann van Ahlen, Prof, MD¹

1: *Dept. of Urology, Klinikum Osnabrueck, Germany*

209 PEDIATRIC TESTICULAR MICROLITHIASIS

Ilhami Surer, MD¹

1: *Gulhane Military Medical Academy, Department of Pediatric Surgery*

210 PATIENT PRE-OPERATIVE DIAGNOSIS AS A PREDICTOR FOR SPERM RECOVERY FROM TESTICULAR BIOPSY IN AZOOSPERMIC MEN

Jeffrey Campbell, MD¹; Francis Tekpetey, PhD²; Gerald Brock, MD, FRCSC²; Valter Feyles, MD, FRCSC²

1: *Western University, London, Ontario*; 2: *The Fertility Clinic, London Health Sciences Centre, London, Ontario*

211 PENILE EPITHELIOID HEMANGIOMA: CASE REPORT AND REVIEW OF LITERATURE

Archana Rajender¹; Elizabeth Phillips, MD²; Ricardo Munarriz, MD²

1: *Boston University School of Medicine, Boston, MA*; 2: *Boston Medical Center, Boston, MA*

212 CHRONIC ORCHIALGIA: INTEGRATIVE LITERATURE REVIEW

Susanne Quallich, MSN¹

1: *University of Michigan*

213 PENILE SONOELASTOGRAPHY AND ITS ROLE IN CHARACTERIZATION OF LESIONS IN PATIENTS WITH PEYRONIE'S DISEASE

Gideon Richards, MD¹; Zachary Pek¹; Bruce Gilbert, MD, PhD¹

1: *The Aurthur Smith Institute for Urology, North Shore/Long Island Jewish Health System, New Hyde Park, NY*

214 A CASE OF EPITHELIOID HEMANGIOENDOTHELIOMA OF THE PENIS INITIALLY MISDIAGNOSED AS PEYRONIE'S DISEASE VS THROMBOSIS OF THE PENIS

Jeffrey Redshaw, BS¹; Daniel Albertson, MD¹; Ryan Coates, BS¹; Ting Liu, MD¹; Will Lowrance, MD¹; Jeremy Myers, MD¹; William Brant, MD¹

1: *Salt Lake City, Utah*

215 PREVALENCE OF NEPHROLITHIASIS AMONG PATIENTS WITH VASCULAR ERECTILE DYSFUNCTION

Jullian Beau, BS¹; William Haley, MD¹; El-Sayed Ibrahim, PhD¹; Alexander Parker, PhD¹; Courtney Coyle, BS¹; Gregory Broderick, MD¹

1: *Mayo Clinic, Jacksonville, FL*

216 COEXISTENCE OF LOWER URINARY TRACT SYMPTOMS AND ERECTILE DYSFUNCTION IN A US PROSTATE CANCER SCREENING POPULATION

Joshua Gonzalez, MD¹; Matthew Hall, MS¹; E. David Crawford, MD²; Michael Diefenbach, PhD¹; Natan Bar-Chama, MD¹; Nelson Stone, MD¹

1: *Mount Sinai Hospital, New York, NY*; 2: *Prostate Conditions Education Council, Centennial, CO*

217 DO WE NEED TO CULTURE THE URETHRA AT THE TIME OF PENILE IMPLANTATION?

Philip Aliotta, MD, MSHA¹; Susan Joseph, RPA-C¹

1: *Buffalo, New York*

218 MANAGEMENT OF PRIAPISM SECONDARY TO LEUKEMIA BLAST CRISIS IN LEUKEMIA: REVIEW OF 2 CASES AT A SINGLE INSTITUTION

Shreyas Joshi, MD¹; Stephen Kappa, MD, MBA¹; Douglas Milam, MD¹

1: Vanderbilt University, Nashville, TN

219 SEXUAL FUNCTION IN SCHIZOPHRENIA

Dennis Lin, MD¹; Carlyn Snyder, MD²; Erika Concepcion, MD²; Giancarlo Colon Vilar, MD²

1: New York, NY; 2: Beth Israel Medical Center, New York, NY

220 USE OF INTERNET SEARCH QUERIES BY AMERICANS TO RESEARCH LOW TESTOSTERONE 2004-2013: WHAT THEY ARE LEARNING ONLINE

Brian Le, MD, MA¹; Arthur Burnett, MD, MBA¹

1: Brady Urological Institute - Johns Hopkins, Baltimore, MD

221 IS HYPOGONADISM ASSOCIATED WITH ARTIFICIAL URINARY SPHINCTER CUFF EROSION?

Allen F. Morey, MD¹; Timothy J. Tausch, MD¹; Jay Simhan, MD¹; Lee C. Zhao, MD¹; J. Francis Scott, BA¹

1: University of Texas Southwestern Medical Center, Dallas, Texas

222 SERUM HORMONE PROFILES AS PREDICTORS OF ADAM QUESTIONNAIRE SCORES

Clarisse Mazzola, MD¹; Boback Berookhim, MD, MBA¹; Sameh Ghaly, MD¹; Keith O'Brien, MD¹; Alex Mueller, MD¹; John Mulhall, MD¹

1: New York, NY

223 COMPARISON OF TESTOSTERONE GEL AND SUBCUTANEOUS TESTOSTERONE PELLETS (TESTOPEL™) ON SEX STEROID HORMONE LEVELS IN HYPOGONADAL MEN

Vikram Soni, MD¹; Anup Shah¹; Mohit Khera, MD, MBA, MPH¹

1: Scott Department of Urology, Baylor College of Medicine, Houston, TX

224 EFFICACY, SATISFACTION AND SAFETY OF TESTOSTERONE REPLACEMENT THERAPY (TRT) IN ELDERLY MEN

Jason M. Scovell¹; Ranjith Ramasamy¹; Jason R. Kovac¹; Dolores J. Lamb¹; Larry I. Lipshultz¹

1: Department of Urology, Baylor College of Medicine, Houston, TX

225 URETHRAL FOREIGN BODIES IN THE POSTPUBERTAL PEDIATRIC POPULATION, SECONDARY TO URETHRAL SOUNDING FOR SEXUAL GRATIFICATION

Daniel Martinez, MD¹; Mark Rich, MD²; Rafael Carrion, MD¹; Hubert Swana, MD²

1: University of South Florida, Tampa, FL; 2: Nemours Children's Hospital, Orlando, FL

226 COMMON SEXUAL HEALTH CONCERNS AND ITS CORRELATION WITH FEMALE GENITAL ANATOMY

Ho Ju Youn¹; So Yeon Kang, MD²; HyunHee Cho, MD, PhD²

1: Best Skilled Obygn Clinic; 2: Catholic University Medical College

FLOOR PLAN

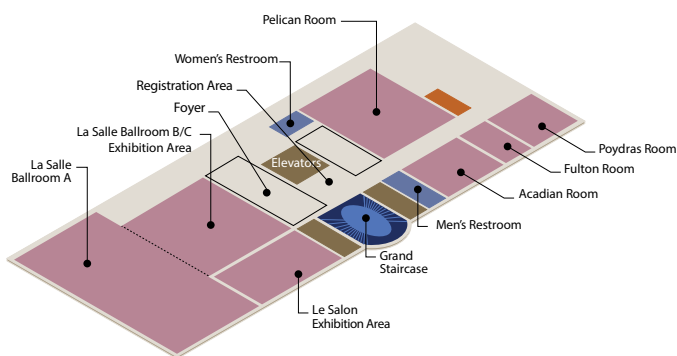


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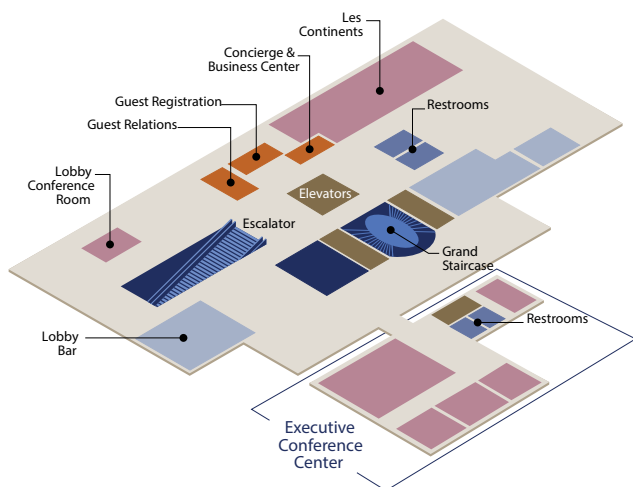
- Acadian Room
- Fulton Room
- La Salle Ballrooms A, B & C
- Le Salon Exhibition-Area
- Pelican Room
- Poydras Room



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Meeting Rooms

- Les Continents
- Lobby Conference Room

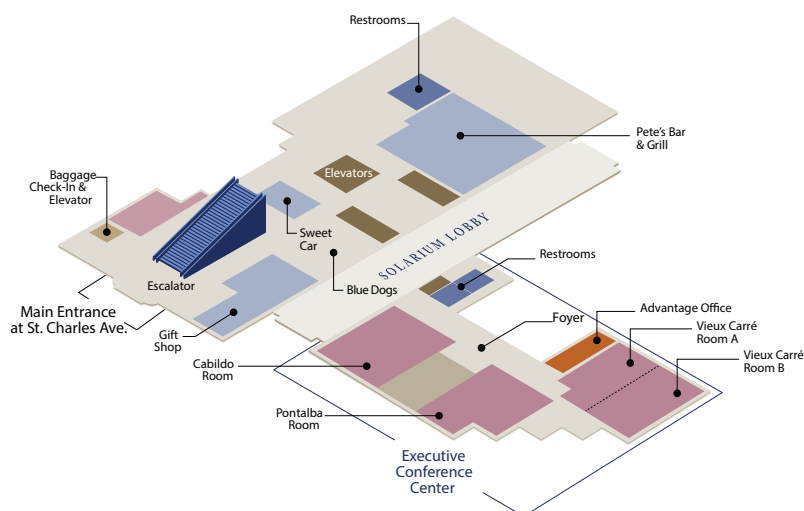


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Meeting Rooms

- Cabildo Room
- Pontalba Room
- Vieux Carré Rooms A & B



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ABSTRACTS

001

PIOGLITAZONE IS PROTECTIVE OF ERECTILE FUNCTION IN A RAT MODEL OF POST-PROSTATECTOMY ERECTILE DYSFUNCTION

Louis Aliperti¹; George Lasker¹; Joshua Hellstrom¹; Korey Walter¹; Edward Pankey¹; Philip Kadowitz, PhD¹; Landon Trost, MD²; Suresh Sikka, PhD¹; Wayne Hellstrom, MD, FACS¹

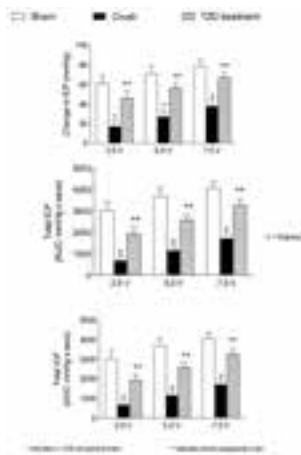
1: Tulane University, New Orleans, LA; 2: Mayo Clinic, Rochester, MN

Introduction: Erectile dysfunction (ED) is a common complication of radical prostatectomy. Pioglitazone (PIO) is a thiazolidinedione utilized in treatment of diabetes mellitus. Given its known vasculoprotective and antifibrotic properties, we evaluated pioglitazone in a rat nerve-crush model of ED.

Materials and Methods: 15 Sprague-Dawley rats were stratified: 1-sham, 2-nerve crush (NC), 3-PIO treatment. Sham rats underwent an abdominal incision. Groups 2 and 3 underwent bilateral cavernosal NC. All rats subsequently underwent oral gavage for 14 days (sham and NC with phosphate buffered saline (PBS), PIO treatment with PIO 0.65 mg/kg). Following a 1-day washout period, all rats underwent cavernosal nerve stimulation at 2.5, 5.0, and 7.5V. Intracavernosal pressure to mean-arterial pressure (ICP/MAP) was assessed. Statistics were performed using Student's t-test, with $p < 0.05$ as significant.

Results: Significant decreases in ICP/MAP were noted with NC rats compared to sham animals at all voltages. PIO-treated animals had significantly increased ICP/MAP values compared to NC controls (PIO vs NC: 2.5V – 0.47 ± 0.07 vs 0.25 ± 0.05 $p = 0.0422$; 5V: 0.57 ± 0.05 vs 0.35 ± 0.07 $p = 0.0343$; 7.5V: 0.62 ± 0.05 vs 0.42 ± 0.05 , $p = 0.0229$).

Conclusion: PIO administration improves erectile function in a rat model of post-prostatectomy ED. Further evaluation is required to identify potential mechanisms of action and assess clinical utility.



002

S-NITROSOGLUTATHIONE REDUCTASE REGULATES NITRIC OXIDE DEPENDENT PENILE ERECTION

Gwen Lagoda, MS¹; Tabitha Goetz¹; Arthur L. Burnett, MD, MBA¹

1: The James Buchanan Brady Urological Institute and Department of Urology, The Johns Hopkins School of Medicine, Baltimore, Maryland.

Introduction: Nitrosylation mediates physiologic effects of nitric oxide (NO), the primary mediator of penile erection. S-nitrosoglutathione reductase (GSNOR) plays an important role in

the regulation of S-nitrosylation and in protection against oxidative/nitrosative stress through denitrosylation of S-nitrosoglutathione (GSNO). This study examines physiologic erectile function (EF) and oxidative/nitrosative stress expression in the penis of mice with a targeted gene deletion of GSNOR (-/-).

Materials and Methods: Adult male GSNOR -/- mice and age-matched wild type (WT) controls were used. EF was assessed by electrically stimulating the cavernous nerve (CN) at 4 volts and recording maximal intracavernosal pressure (ICP) above baseline. A separate group of mouse penes were collected at baseline for western blot analysis of the oxidative/nitrosative stress markers nitrotyrosine (NT), 4-hydroxynonenal (4-HNE) and Malondialdehyde (MDA).

Results: Following electrical stimulation of the CN GSNOR -/- mice had significantly decreased maximal ICP values compared to WT mice at 4 volts ($p < 0.05$). At baseline, NT, 4-HNE and MDA expressions were all significantly increased in GSNOR -/- mice compared to WT mice ($p < 0.05$).

Conclusions: The altered EF in GSNOR -/- mice suggests the functional importance of GSNOR as an active denitrosylation mechanism in the penis and evidence of increased oxidative/nitrosative stress in the penis implies adverse erection effects of unchecked GSNO.

003

EFFECT OF LDD175 ON THE MODULATION OF CORPORAL SMOOTH MUSCLES TONE

Sung Won Lee¹; Seol Ho Choo, MD¹; Mee Ree Chae¹; Hyun Hwan Sung, MD¹; Deok Hyun Han, MD¹; Su Jeong Kang¹; Jong Kwan Park, MD, PhD²

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Introduction: The aim of this study was to investigate relaxation effect of LDD175, a novel benzofuroindole compound, on corporal smooth muscles. **Methods:** Isolated rabbit corporal strips were mounted on organ-bath systems. Vasodilatory effects of LDD175 were evaluated by cumulative addition (10^{-7} ~ 10^{-4} M) in endothelium-intact and -denuded strips after precontraction with phenylephrine 10^{-5} M (PE). In order to demonstrate the role of K⁺ channels on LDD175-induced relaxation, the strips were preincubated with the specific inhibitor of BKCa channels, 200 nM iberiotoxin (IbTX), for 30 min. Isolated and synergistic effects of udenafil were investigated. The whole-cell patch clamp technique was used to record the changes in BKCa currents in human corporal smooth muscle cells.

Results: LDD175 caused endothelium independent relaxation and IbTX abolished this effect. LDD175 (10^{-4} M) showed more potent relaxation than udenafil (10^{-6} M) ($54.0 \pm 3.1\%$, $n = 10$ vs. $34.5 \pm 3.9\%$, $n = 6$, $p < 0.05$). LDD175 10^{-5} M with udenafil 10^{-6} M was more potent than LDD175 10^{-5} M only or udenafil 10^{-6} M only (50.7%, 34.1%, and 20.7%, respectively, $n = 7$, $p < 0.001$). In patch clamp recordings, LDD175 increased K⁺ currents in a dose-dependent manner, and washout of LDD175 or blockade of BKCa channel with IbTX or TEA fully reversed the increase. The activation

thresholds of BKCa channel currents were shifted to more negative voltages close to the resting potential. The potency and efficacy of LDD175 were higher than that of NS1619, a selective BKCa channel opener (at -40mV, NS1619: 1.3 fold, LDD175: 42.8 fold vs. control).

Conclusions: LDD175 leads to an endothelium independent relaxation of erectile tissue primarily through BKCa channels. The results suggest that LDD175 might be a new candidate for erectile dysfunction treatment.

004

ENOS AND NNOS UNCOUPLING IN TYPE 1 DIABETIC PENIS AND MAJOR PELVIC GANGLIA

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Introduction: Erectile dysfunction (ED) associated with type 1 diabetes mellitus (T1DM) is characterized by eNOS and nNOS dysfunction and increased oxidative stress in the penis and penile innervation; however, the underlying mechanisms are not fully defined. We investigated eNOS and nNOS uncoupling in the penis and major pelvic ganglia (MPG) as possible mechanisms of ED in T1DM, and the role of BH4 as a regulator of NOS uncoupling.

Methods: Rats were rendered T1DM by ip injection of 70 mg/kg streptozotocin. After 8 weeks, penes and MPG were collected. BH4 levels in the penis were measured by HPLC. eNOS uncoupling in the penis and nNOS uncoupling in the MPG were measured by Western blot. To evaluate the role of BH4 in NOS uncoupling, erectile function (intracavernosal pressure) was measured in mice overexpressing (GCH-Tg mice) and underexpressing (hph-1 mice) BH4. nNOS uncoupling was measured in the penis of hph-1 mice. Results: The ratio of eNOS dimers/monomers ($P<0.05$) in the penis and the ratio of nNOS dimers/monomers ($P<0.05$) in the MPG of diabetic rats were decreased compared to that of nondiabetic rats. BH4 levels were decreased in the penis of diabetic rats. GCH-Tg mice exhibited increased ($P<0.05$), while hph-1 mice exhibited decreased erectile response compared with that of wild type (WT) mice. The ratio of nNOS dimers /monomers was decreased in the penis of hph-1 mice compared to that of WT mice.

Conclusion: T1DM uncouples eNOS in the penis by reducing BH4 availability, and uncouples nNOS in the MPG, conceivably contributing to ED. Optimal levels of BH4 mediate coupled eNOS and nNOS function in the penis and physiologic erectile function.

005

EARLY COMBINED TREATMENT WITH AVANAFIL AND ADIPOSE TISSUE-DERIVED STEM CELLS PROMOTES RECOVERY OF ERECTILE FUNCTION IN A RAT MODEL OF POSTPROSTATECTOMY INDUCED ERECTILE DYSFUNCTION

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Introduction: Radical prostatectomy is the gold standard treatment for localized prostate cancer. Several management strategies have been evaluated with varying results to prevent post-operative erectile dysfunction (ED). The objective of this study was to evaluate the effect of combined treatment with avanafil and adipose-derived stem cells (ADSCs) on erectile activity following bilateral cavernosal nerve crush injury (BCNI) in the rat model.

Materials and Methods: Twenty-five Sprague-Dawley rats (300-350 g) were divided into five groups: i) sham-operated group, ii) BCNI group, iii) avanafil treatment group (oral administration of avanafil 20 mg/kg daily for 4 weeks following BCNI), iv) ADSC treatment group (intracavernosal injection of ADSCs on the same day as BCNI) and v) ADSC + avanafil treatment group (ADSC injection + 4 weeks of oral avanafil treatment following BCNI). Four weeks following BCNI, animals underwent electrophysiological assessment of erectile function. Penile tissues were harvested for further evaluation.

Results: BCNI rats showed a significant decrease in the total intracavernous-to-mean arterial pressure ratio (ICP/MAP) compared to sham animals. Daily oral avanafil treatment and ADSCs injected alone resulted in significant improvements in ICP/MAP ratios compared to the BCNI group. Combination treatment (ADSCs + avanafil) markedly improved erectile function. Histologically, combination treatment demonstrated significant reduction in the pathology of the cavernosal tissues as was observed in the other groups.

Conclusion: Orally administered avanafil in combination with intracavernosal injection of ADSCs following BCNI optimally restored erectile function in a rat model of postprostatectomy ED.

006

INTRATUNICAL INJECTION OF MODIFIED ADIPOSE TISSUE-DERIVED STEM CELLS EXPRESSING HUMAN INTERFERON A-2B FOR TREATMENT OF ERECTILE DYSFUNCTION IN A RAT MODEL OF PEYRONIE'S DISEASE

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Introduction: Intralesional treatments are a minimally invasive approach in the treatment of Peyronie's disease (PD). The aim of this study was to compare the efficacy of intratunical injection of adipose tissue-derived stem cells (ADSCs) vs. genetically modified ADSCs with human interferon α -2b (ADSCs-IFN) for the treatment of erectile dysfunction in a rat model of PD.

Materials and Methods: A total of 36 male Sprague-Dawley rats (300-350 g) were randomly divided into six groups: sham (saline-injected into the TA); PD (transforming growth factor (TGF)- β 1 (50 μ g) injected into the TA); prevention groups (5x10⁵ ADSCs or ADSCs-IFN injected into TA on the same day as TGF- β 1 injection); and treatment groups (5x10⁵ ADSCs or ADSCs-IFN injected into TA

30 days after TGF- β 1 injection). Forty-five days following TGF- β 1 injection, the total intracavernous-to-mean arterial pressure ratio (ICP/MAP) and total ICP (area under the erectile curve) during cavernous nerve stimulation (CNS) was determined. Additionally, the mRNA expression of tissue inhibitors of metalloproteinases (TIMPs), matrix metalloproteinases (MMPs), the zymographic activity of MMPs, and the histological/immunohistochemical assessment of the penile tissues were evaluated.

Results: Erectile responses as measured by ICP/MAP and total ICP were significantly enhanced with genetic modification of the ADSCs in the treatment group. Local injection of the ADSCs-IFN reduced Peyronie's-like changes by decreasing the expression of TIMPs and stimulating the expression and activity of MMPs.

Conclusion: This study documents the therapeutic benefits of ADSCs-IFN in an animal model of PD. Regenerative medicine in combination with gene modification in the field of PD is anticipated to evolve rapidly.

007

MYOSTATIN, A KEY INHIBITOR OF SKELETAL MUSCLE MASS AND PROFIBROTIC FACTOR, IS EXPRESSED IN THE PENILE CORPORAL AND ARTERIAL SMOOTH MUSCLE, AND MAY AFFECT PENILE GROWTH AND SMOOTH MUSCLE CONTENT

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Introduction: Myostatin (GDF-8) is a member of the TGF β family that binds to the ActIIb receptor and is inactivated by follistatin. Although mainly restricted to skeletal muscle, it has also been identified in the smooth muscle (SM) of the myometrium, and in the fibroblasts of the penile tunica albuginea. Since several forms of erectile dysfunction are associated with loss of SM and fibrosis in the corpora cavernosa, we have determined whether myostatin is expressed within this tissue and if so, what role it may play in its physiology.

Methods: Tissue sections from the rat penile shaft were subjected to immuno-fluorescence for myostatin. Tissue homogenates of rat and human penile SM cells and fibroblasts were assayed by western blots. RNAs were assayed by DNA microarrays and RT/PCR. Penile tissues from 1 year old myostatin knock-out (Mst-KO) and wild type (Mst-WT) mice were used for Masson trichrome staining.

Results: Myostatin protein was expressed in the ischiocavernosus myofibers, and the corporal SM and penile dorsal artery, as well as in cultured penile SM cells and fibroblasts. RT/PCR identified myostatin mRNA in the penile shaft and its cell cultures. Follistatin and ActIIb receptor mRNAs were expressed in the SM cells at a 25 and 1.5 fold excess, respectively, over myostatin mRNA, that in turn was 1/10 of the other profibrotic factor mRNA, TGF β 1. Genetic blockade of myostatin led to a 40% increase in the crura/body weight ratio, but no change in the penile shaft, and a 2.4 higher corporal SM/collagen.

Conclusions: We found myostatin/follistatin expression in the penile corporal and arterial SM. Myostatin, as in the skeletal muscle, may have an inhibitory role on SM content and penile growth. Speculatively, myostatin may be involved in corporal and perineal muscle atrophy/fibrosis.

008

DOES DEPENDENT EFFICACY OF HUMAN ADIPOSE TISSUE-DERIVED STEM CELLS IN STREPTOZOCIN-INDUCED DIABETIC RATS WITH ERECTILE DYSFUNCTION

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Introduction: The aim of this study is to investigate whether injection of human adipose-derived stem cells (ADSCs) according to the range of cellular doses can ameliorate DM-associated ED.

Materials and Methods: Twenty male Sprague-Dawley rats were injected with streptozocin (STZ) to develop type 1 DM, whereas 10 served as normal controls. Diabetic rats were randomly divided into three groups: rats that underwent intracavernous injection with PBS (n=10, DM+PBS), low dose human ADSCs (n=5, 1X10⁶ cells/100 μ L, DM+IADSC) and high dose human ADSCs (n=5, 2X10⁶ cells/100 μ L, DM+hADSCs). Human ADSCs were labeled with PKH-26, and then transplanted into corporal cavernosum of diabetic rats. Four weeks after transplantation, all rats were analyzed for erectile function (the ratio between intracavernous pressure (ICP) and mean arterial pressure (MAP)) and smooth muscle and endothelium markers in corpora cavernosum.

Results: After human ADSCs transplantation, the ICP/MAP ratio of IADSC and hADSC groups were increased significantly compared with diabetic controls, but there was no significantly increased the ratio in hADSC group compared with IADSC group (0.76 \pm 0.10 vs. 0.58 \pm 0.15, p=0.064). Content of smooth muscle and endothelium in corporal cavernosum of human ADSCs transplanted rats was significantly increased compared to diabetic controls. The α -smooth muscle actine marker and eNOS (western blot) were significantly increased in hADSC group compared with IADSC group, but von Willebrand factor marker did not increase. At days of 28, a few human ADSCs were visualized in corporal cavernosum. Conclusions: Intracavernous transplantation of human ADSCs had beneficial effects on erectile function and histopathology of diabetic rats but more work is needed to define the optimal stem cell doses.

009

OPIOEPHIN MEDIATED UP-REGULATION OF HIF1A IS AN EARLY EVENT IN THE DEVELOPMENT OF PRIAPISM IN SICKLE CELL MICE

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Introduction: Several molecular mechanisms resulting in prolonged relaxation of corporal smooth muscle tissue have been identified which may contribute to the development of priapism associated with sickle cell disease. Opiorphins are peptides involved in the regulation of smooth muscle tone. The mouse opiorphin homologue, Smr2, is up-regulated in the corpora of sickle cell mice at a life stage prior to the development of a priapic condition. We have investigated the potential role of Smr2 in regulating Hif1a, a transcription factor playing an essential role in cellular and systemic responses to hypoxia.

Materials and Methods: Gene expression in the corpora of sickle cell mice was compared to control mice at different stages in the life cycle by quantitative (qt)-RT-PCR. In rat corporal cells in vitro the expression of genes was investigated with and without Smr2 treatment. Activation of the Hif1a promoter by opiorphin was investigated using a luciferase-reporter construct transfected into HEK293 cells.

Results: Smr2 was significantly up-regulated in corporal tissue in sickle cell mice at a life stage prior to displaying priapism, at which time Hif1a expression was unchanged. At a life-stage when mice exhibited priapism, both Hif1a and Smr2 were significantly up regulated. In mouse corporal cells incubated with Smr2 there was a dose dependent up-regulation of Hif1a. We also demonstrated opiorphin can activate the Hif1a promoter in HEK293 cells.

Conclusions: We demonstrate that expression of Hif1a is regulated by Smr2, a gene up-regulated at an early life age in the corpora of sickle cell mouse. Hif1a plays a role the cellular response to hypoxia and our findings have implications for the mechanism for development of priapism and other pathologies associated with sickle cell disease.

010

NITRIC OXIDE SYNTHASE IS NECESSARY FOR NORMAL UROGENITAL DEVELOPMENT

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Introduction: We've shown in previous studies that penis and prostate development rely on Sonic hedgehog (SHH) signaling during postnatal morphogenesis. SHH inhibition decreases neuronal nitric oxide synthase (NOS-I) in the penis and the pelvic ganglia/cavernous nerve (PG/CN). This led us to examine if NOS plays a role in development of urogenital tissues, including the penis, prostate and bladder. While the role of nitric oxide and NOS in relaxation of smooth muscle has been well documented, it has not been examined if NOS impacts morphogenesis of urogenital tissues during development and in the adult. Since NOS is decreased in ED models, it may contribute to the abnormal morphology observed in ED patients and animal models.

Methods: NOS-I was quantified by western analysis in SHH inhibited penis and PG/CN. NOS signaling was inhibited with L-NAME treatment in postnatal day 4 (P4) Sprague Dawley rats for 8 days. Penis, prostate and bladder morphology were examined. Tissue weight, TUNEL and smooth muscle and collagen analysis were quantified by trichrome stain with Image J analysis. Immunohistochemical analysis for NOS-I and -III and semi-quantitative RT-PCR were performed.

Results: SHH inhibition in the PG/CN decreased NOS-I 47% in the PG/CN and 35% in the penis. NOS inhibition decreased bladder weight by 25%. Penis, prostate and bladder morphology were altered with L-NAME treatment. Nos-III expression remained relatively constant during penis development but declined slowly with age in the prostate.

Conclusions: These results show that NOS is important for normal urogenital development. Since NOS remains functional in adult urogenital tissues, it may continue its morphogenetic function in the adult penis, prostate and bladder.

011

ADENOSINE SIGNALING NETWORK INNORMAL PENILE ERECTION

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Multiple cellular systems, factors and signaling pathways are involved in penile erection. Nitric oxide (NO) is widely considered to be a principle factor controlling normal erectile function. However, genetic evidence indicates that mice lacking endothelial NO synthase (eNOS), neuronal NO synthase (nNOS) or both, retain erectile function, suggesting that factors other than NO contribute significantly to penile erection. Here we report that endogenous adenosine levels were elevated in the erected state compared to flaccid state in mice. Next, we demonstrate that lowering adenosine concentrations in penile tissue in mice significantly reduced initiation and maintenance of penile erection. These findings led us to further discover that ecto-5'-nucleotidase (CD73), a key cell-surface enzyme to convert ATP released from activated neuronal cells and shear-stressed endothelial cells to exogenous adenosine, contributes to both initiation and maintenance of penile erection. These studies led us to further discover that elevated adenosine signaling via ADORA2B contributes to normal penile erection in two ways: 1) directly by ADORA2B signaling on CSM to directly induce cAMP production; 2) indirectly by induction of cGMP production in smooth muscle cells following the activation of eNOS in endothelial cells via the PI3K/AKT signaling cascade and induction of eNOS gene expression in HIF-1-dependent manner. As such, adenosine signaling via ADORA2B results in increased cAMP and cGMP production and decreased myosin light chain phosphorylation, features that contribute to corpus cavernosal relaxation and penile erection. Finally, we provide both genetic and pharmacological evidence that adenosine activating adenosine A1 receptors on cavernosal neuronal cells leads to decreased norepinephrine levels and therefore relaxation and penile erection. Overall, our findings reveal a previously unrecognized role of adenosine signaling network in normal penile physiology and novel therapeutic targets for erectile disorders.

012

IMPACT OF ACUTE AND CHRONIC ALCOHOL ADMINISTRATION ON PENILE ERECTION

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This study was conducted to investigate the effect of acute and chronic alcohol administration (AA) on penile erection and its mechanism.

To examine the effect and mechanism of the AA, changes in the blood alcohol concentration, relaxation response of CC, intracorporal pressure (ICP/MAP), cAMP and cGMP levels were measured according to time in acute and chronic AA groups. Masson's Trichrome stain and Sircol collagen assay were performed. In addition, density of eNOS expression was also examined using immunohistochemistry and changes in eNOS activity were also examined using western blot.

Ethanol and its metabolite acetaldehyde were shown to relax the contracted CC in a dose-dependent manner. The relaxation response was more suppressed in ethanol groups pretreated with propranolol, indomethacin, glibenclamide, and 4-aminopyridine. However, no suppression of relaxation response was shown in acetaldehyde groups. After acute AA, the blood alcohol concentration, the change in the ICP/MAP percentage and the cAMP level were shown to have reached the peak 2 hours after administration. The ICP/MAP percentage, and the cAMP and cGMP level were shown statistically insignificant change in the chronic AA group. The smooth muscles were markedly decreased and dense collagen in tissues were increased in the chronic AA group to the control group. Western blotting showed that eNOS expression was significantly lower in the chronic AA group than in the control group.

Alcohol relax the CC in a dose-dependent manner and acute AA can be effective to erectile function. Meanwhile, chronic AA showed no effectiveness on erectile function. The smooth muscles were decreased and collagens were increased in chronic AA. It is also likely that chronic AA suppresses eNOS expression, thereby leading to erectile dysfunction

013

NOVEL GENETIC FACTORS LINKED TO PEYRONIE'S AND DUPUYTREN'S DISEASES

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Introduction and Objective: Peyronie's Disease (PD) occurs in 5–10% of men and can impact their sexual health. PD occurs with Dupuytren's Disease (DD) in ~20% of men with either condition, and both diseases have a genetic basis. Here we present genomic data identifying three genes with potential roles in both PD and DD. **Methods:** Genomic DNA from 10 men with both PD and DD and 4 male controls was used for microarray-based comparative genomic hybridization (aCGH) to assess for copy number variations (CNVs). Candidate PD/DD genes were selected based on 1) frequency of CNVs in the gene and 2) magnitude of the gain/loss. Gene copy numbers were validated using Taqman qPCR, Sanger DNA sequencing performed to assess for single nucleotide

polymorphisms (SNPs), and bioinformatic analysis of the impact of SNPs on protein function performed.

Results: Copy number losses in the NEL-like1 (NELL1), testis specific-protease 50 (TSP50) and zinc finger protein 277 (ZNF277) genes were identified using aCGH, each in one of 10 men with PD and DD, and in no controls. These losses were validated via qPCR. The CNV frequencies of the above genes in a database of patients not selected for specific conditions were: NELL1 0.022%, TSP50 0.009%, and ZNF277 0.020%, in contrast to 10% for each gene in our patient population. Sequencing of the NELL1 gene in all ten men with PD and DD yielded two SNPs in exon 3 (G>A:82R>Q; C>T:98 S>S/S), none of which were predicted to be damaging to protein function. Sequencing of TSP50 and ZNF277 is underway. **Conclusions:** Copy number variations in NELL1, TSP50, and ZNF277 were identified in men with both PD and DD. Future work assessing the impact of these genes on fibrosis-related cellular pathways and in animal models will elucidate the roles of these genes in PD and DD.

014

MECHANISMS OF DECREASED RAT BULBOSPONGIOSUS MUSCLE ACTIVITY AFTER BOTULINUM TOXIN TYPE A INJECTION

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Introduction: Botulinum toxin type A (BTx-A) is prescribed for indications, including overactive bladder, neurogenic bladder, and detrusor-sphincter dyssynergia. Although recent studies have described atrophy following intramuscular injection of BTx, minimum data is currently available regarding the underlying mechanism of this process. Considering our interest in role of BTx-A in premature ejaculation, we evaluated its role in rat bulbospongiosus (BS) muscle after neuromuscular blockage with BTx injection.

Method: 13 male Sprague Dawley rats were divided into 3 groups and treated with single injection into the BS muscle of: (a) control (saline), (b) low dose (BTx-A, 0.5 units), and (c) high dose (BTx-A, 1.0 unit). Rats were subsequently sacrificed at 4 weeks and the BS was isolated. Various analyses were performed to evaluate expression of Sirt3 and α -tubulin by Western blot; NADPH oxidase activity by lucigenin chemiluminescence, and DNA fragmentation by TUNEL assay.

Results: BS muscle treated with BTx-A demonstrated significant decrease in Sirt3 expression compared to controls ($p < 0.05$) in a dose dependent manner. Using a quantitative Sirt3/ α -tubulin ratio, Sirt3 levels decreased by 70% in high dose group, 25% in low dose group, compared to control. NADPH oxidase activity using relative light units was significantly increased in both low dose (800 RLU) and high dose (1500 RLU) groups compared to controls (400 RLU). Using TUNEL categorical scores, apoptotic nuclei was identified more frequently in low dose (10) and high dose (15) groups, compared to controls (5).

Conclusion: BTx decreased Sirt3 expression and increased NADPH oxidase activity in the rat BS muscle that may cause oxidative stress and affect ATP production. This results in decreased BS muscle activity leading to atrophic changes.

015

PRECLINICAL STUDIES REVEAL MOLECULAR BASIS OF ELEVATED ADENOSINE SIGNALING IN PRIAPISM AND NOVEL THERAPIES

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Priapism, a condition characterized by prolonged and undesired erection, is rare in the general population, but prevalent among males with sickle cell disease (SCD). Recent evidence indicates that excess adenosine contributes to priapism via adenosine A2B receptor (ADORA2B). Here we evaluate the therapeutic potential of targeting ADORA2B signaling for the treatment of priapism in two animal models. We show that the use of adenosine deaminase (ADA) enzyme therapy to reduce adenosine or a specific antagonist to block ADORA2B signaling attenuates priapism in two animal models, ADA-deficient mice and SCD mice. These mice were also characterized by elevated hypoxia inducible factor-1 α (HIF-1 α) and endothelial nitric oxide synthase (eNOS) mRNAs in penile tissue, features that were reversed by ADORA2B antagonism. Mechanistically, we found that eNOS activity, characterized by phosphorylation on serine¹¹⁷⁷, was increased in the penile tissues of ADA-deficient mice similar to the elevation of eNOS mRNA and significantly reduced by ADORA2B antagonism. To our surprise, the phosphorylation of eNOS on Ser¹¹⁷⁷ was significantly reduced in the penile tissues of SCD mice, indicating that elevated HIF-1 α -dependent induction of eNOS gene expression does not lead to increased eNOS function in SCD mice as in ADA-deficient mice. However, we found that cAMP levels were significantly increased in the penile tissues of both ADA-deficient mice and SCD mice and the increase is inhibited by ADORA2B antagonist treatment. Overall, our studies reveal ADORA2B-mediated cAMP induction is a common signaling network underlying priapism associated with ADA-deficiency and SCD and provide strong preclinical evidence for the potential utility of ADA enzyme treatment or ADORA2B antagonism as potential therapies for priapism.

016

A POTENT ANTIOXIDANT 4-HYDROXY-2,5,6-TRIAMINOPYRIMIDINE (HTP) RELAXES CAVERNOSAL SMOOTH MUSCLE AND IS A POTENTIAL THERAPEUTIC AGENT FOR ERECTILE DYSFUNCTION

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Introduction/Objective: Phosphodiesterase 5 inhibitors (PDE5i) are considered to be current gold standard for treating erectile dysfunction (ED) but there are many non-responders to these drugs. We evaluated a newer folate derivative with strong antioxidant properties that has potential of treating ED in such non-responders to PDE5i.

Methods: Using organ bath setup, human and rat cavernosal strips were precontracted with phenylephrine and treated with 100 μ M of HTP, sildenafil (Viagra) and tadalafil (Cialis) for 4 hours. Also human corpus cavernosal smooth muscle cells (CCSMC) in culture were treated with 100 μ M of HTP, sildenafil and tadalafil for 24 h. These tissues and cells were subjected to various molecular studies.

Results: Human and rat corpora cavernosa strips precontracted with phenylephrine demonstrated increased relaxation with HTP (76.7% \pm 13%) compared to sildenafil (55.8 \pm 6.7%) and tadalafil (53 \pm 2.7%). CCSMC showed enhanced mRNA expression of nNOS with 100 μ M of HTP compared to sildenafil and tadalafil. However, the mRNA expression of endothelial eNOS was down-regulated with HTP and sildenafil but up-regulated with tadalafil. PDE5-A mRNA expression increased after treatment with HTP and sildenafil but decreased with tadalafil. The expression of mitochondrial antioxidant superoxide dismutase (mtSOD) showed 7-fold increase while the angiogenic connective tissue growth factor (CTGF) showed 2.5-fold increase with HTP. The expression of phosphodiesterase 5 A (PDE5-A) showed 0.61 fold reduction whereas the expression of protein kinase G-I was not different compared to control.

Conclusion: These findings suggest potential role of HTP in cavernosal smooth muscle relaxation via NOS pathway and may provide an alternative option for men with refractory ED. Further in-vivo studies are in progress.

017

IS THE ENDOGENOUS VASOACTIVE PEPTIDE BRADYKININ A KEY MEDIATOR OF PENILE ERECTION IN THE HUMAN MALE?

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Introduction: Endogenous vasoactive peptides have been shown to interact with the nitric oxide (NO) system in order to induce and maintain penile erection in the human male. Bradykinin (BK) can trigger the endothelium/NO-dependent relaxation of (vascular) smooth muscle. The present study attempted to examine the

effects of BK on isolated human penile erectile tissue and measure in the cavernous and systemic blood of healthy males the course of BK through different stages of sexual arousal.

Methods: Using the tissue bath technique, the effects of increasing concentrations of BK (0.1 nM – 1 μ M) on the tension of isolated human corpus cavernosum penis (HCC) were investigated. Whole blood was drawn simultaneously from the corpora cavernosa and cubital veins of 10 healthy male subjects during penile flaccidity (F), tumescence (T), rigidity (R), and detumescence (D). Following extraction of the peptide from the plasma samples, BK was measured by means of an enzyme-linked immunoassay.

Results: The addition of BK resulted in a reversion of tension induced by norepinephrine of HCC. The concentration inducing 50% relaxation was determined 5 nM. BK (given in pg/mL plasma) decreased in the cavernous blood, when the penis became tumescent (129.3 ± 49.8 to 69.7 ± 61.9). During rigidity, mean BK level remained almost unaltered (64.6 ± 59.0) and increased only slightly in the phase of detumescence (79.7 ± 43.0). A similar course was observed in the systemic circulation.

Conclusion: It seems unlikely that BK acts as a main mediator of penile erection. The decrease in BK in both the systemic and cavernous blood during penile tumescence and erection might be due to the general increase in cardiovascular responses during sexual arousal. This may include the activity of the BK-degrading kininase angiotensin-converting enzyme.

018

PENILE TRACTION THERAPY IMPROVE PENILE CURVATURE IN PEYRONIE'S RAT MODEL

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Introduction: Recently, penile traction therapy (PTT) has gained considerable interest as a novel nonsurgical modality for Peyronie's disease (PD). However, there are limited clinical studies and no basic scientific data to explore this modality. This study was designed to explore the effect of PTT on a Peyronie's disease animal model.

Materials and Methods: Peyronie's plaque was induced in 10 adult male rats using an established Peyronie's disease animal model. At week 4, penile curvature was measured and rats were divided into two groups according to their similar curvatures. Control group (n=5) and PPT group (n=5, rat penis was straightened by a suspended tension gauge at the same tension by clamping prepuce. This was performed 3 times per day, for 20 minutes per session, with 5 minute intervals in between sessions.). At week 8, penile curvature was measured again. Intracavernosal pressure (ICP) and mean arterial pressure (MAP) were measured under cavernous nerve stimulation.

Results: PPT group reduced the penile curvature at week 8 compared to their measurements at week 4 ($P<0.05$). PPT Group reduced the penile curvature at week 8 compared with control group at week 8 ($P<0.05$). There was no significant change in ICP/MAP between two groups at week 8 ($P>0.05$).

Conclusion: This study suggested that PTT could reduce penile curvature in rat Peyronie's disease model, but could not improve erectile function.

019

THE ANTI-INFLAMMATORY AND ANTI-FIBROSIS EFFECTS OF ANTHOCYANIN EXTRACTED FROM BLACK SOYBEAN ON A PEYRONIE'S DISEASE RAT MODEL

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To evaluate the potential of anthocyanin as a supplement for the treatment of Peyronie's disease (PD) by examining the anti-inflammatory and anti-fibrosis activities of anthocyanin in a PD animal model.

Materials and Methods: A PD rat model was made by intracavernous injection of fibrin. Experimental animals were divided into three groups as follow: control (n=10), PD (n=10), and anthocyanin (AC)-treated groups (n=10). After four weeks, intracavernosal pressure was measured, and penile tissue was collected to perform Masson's trichrome and TGF- β 1 staining. We confirmed PD-like plaque formation by Masson's trichrome stain two weeks after fibrin injection. The peak ICP/MAP ratios of the PD group were significantly lower than either the control or AC groups ($P<0.05$). The ratio of smooth muscle cells in the corpus cavernosum in the PD group was significantly lower than the control group ($P<0.05$). The PD group showed strong TGF- β 1 immunoreactivity with increased expression in the collagenous connective tissues and fibroblasts around the cavernosus. The current study suggests that anthocyanins extracted from black soybean may have anti-inflammatory and anti-fibrotic effects in PD rat models. We suggest that anthocyanins may be an effective treatment option to manage and prevent PD.

020

TIME COURSE OF TREATMENT EFFECT OF AUTOLOGOUS ADIPOSE STROMAL VASCULAR FRACTION IN TYPE 2 DM RATS (ZFDM) WITH ERECTILE DYSFUNCTION: PRELIMINARY DATA

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Introductions: In this study, we investigated the effects of autologous aSVF on the time course of functional and histological properties in diabetic erectile dysfunction (ED).

Materials and Methods: Fifteen 10-week old male type 2 diabetic fa/fa Zucker Fatty Diabetes Mellitus (ZFDM) rats (DM group) and five fa/+ ZFDM rats (control group) underwent weight and blood glucose measurement every one week. At age 22 weeks, in the DM group, we injected aSVF (n=12) (2 X 10⁶ cells/100 μ L) (aSVF group) or vehicle (n=3) (PBS group) in the cavernosum. Preliminarily, we evaluated IC pressure (ICP) at 3 d (n=3) and 28 d (n=3), immunohistochemistry (vWF) at 1d (n=3), 3d(n=3), 28d(n=3) and western blot (eNOS, nNOS) at 28d after intracavernosal injection of aSVF.

Results: Differences in non-fasting blood glucose level between fa/fa and fa/+ rats were evident as early as 11 weeks of age and were maintained until 22 weeks of age (fa/fa 353 \pm 189.2 mg/dl vs.

fa/+ 124.0±10.9 mg/dl, $p = 0.029$). The ratio of maximal ICP and MAP were significantly lower in PBS group at 28d and aSVF group at 3d than control group (0.16, 0.21, 0.66, $p=0.002$). However, at 28d ICP/MAP increased significantly in aSVF group compared with PBS group (0.86 vs. 0.21, $p=0.003$). At days of 1, 3 and 28, vWF was gradually increased in aSVF group (18.7, 21.7, 23.7, $p=0.06$) and at 28d, eNOS on western blot increased significantly in aSVF group compared with PBS group (32.8 vs. 23.6 $p<0.001$). However, at 28 d, the levels of nNOS expression in the penile dorsal nerves were similar between PBS and aSVF groups.

Conclusions: Intracavernous injection of autologous aSVF gradually restored erectile function through regeneration of the cavernous endothelium in type 2 ZFDM rats with ED.

021

INFLUENCE OF THE NEW HERBAL MIXTURES MADE ACCORDING TO THE KOREAN TRADITIONAL REMEDIES ON SPERM QUALITY

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Introduction: Infertile couples are willing to use herbs to overcome their problems. However, the safety and exact mechanism of herbs on infertility was not identified. Therefore, we investigated the safety and influence of the new herbal mixtures which were made according to the Korean traditional remedies on sperm quality.

Materials and Methods: In vitro cytotoxicity test in TM3 Leydig cell was performed to evaluate cell viability after administration with 5 types of herbs and the new herbal formula. In vivo test in male mice was performed to evaluate the influence of the new herbal formula on the reproductive organ and sperm quality. After 8- and 28-day oral administration with the new herbal formula, the measurement of weights of reproductive organ and the evaluation of sperm count and activity were performed.

Results: In vitro cytotoxicity test, less than 80% cell viability of *Rubus coreanus* Miquel and *Cuscuta chinensis* Lam was observed at concentration of 500 and 1000 ppm. However, more than 80% cell viability of the new herbal formula was observed at every concentration. After 8- and 28- day oral administration, there were no considerable changes of body weights. The weights of testes, epididymis, and seminal vesicles after 8- and 28- day oral administration were similar with the control. After 100, 200, and 400 mg oral administration, sperm account and activity were significantly improved compared with the control group at 8 and 28 days after administration.

Conclusions: Safety and positive influence on the sperm quality were observed after oral administration with the new herbal formula. Further studies are needed that the new herbal formula becomes one of oral antioxidant in men with infertility.

022

A COMPARATIVE STUDY OF NON-VIRAL TRANSFECTION METHODS FOR EFFECTIVE GENE DELIVERY TO CORPORAL SMOOTH MUSCLE CELLS

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Introduction: Gene therapy has been proposed as a potential for new therapies for refractory erectile dysfunction. Although transfection rate is very low, non-viral gene delivery has been widely investigated to overcome problems associated with viral gene delivery. We evaluated efficacy and safety of non-viral transfection methods to find optimal transfection methods for primary corporal smooth muscle cells.

Materials & Methods: We tested the transfection efficacy of chemical transfection methods using lipid-based transfection reagents such as X-tremeGENE HP or Lipofectamine® LTX & Plus, and electroporation with Neon™ Transfection System from Invitrogen™. Transfection efficiency was evaluated by fluorescence microscopy and flow cytometry for the expression of the green fluorescent protein. The viability of transfected cells were determined by MTT assay.

Results: Lipofectamine® LTX & Plus was more effective than X-tremeGENE HP with minimal loss of cell viability in primary human corporal smooth muscle cells (hCSM) and HEK293 cells. The transfection efficiencies and viability with Lipofectamine® LTX & Plus were $60.3 \pm 3.1\%$ and $82.7 \pm 2.3\%$ for HEK293 cells, $33.4 \pm 4.5\%$ and $90.3 \pm 2.3\%$ for hCSM. The cytotoxic effects of the transfection reagents were similar between Lipofectamine® LTX & Plus and X-tremeGENE HP. Although optimized electroporation conditions (1400 v, 20 ms, 2 pulse) for primary hCSM exhibited a high transfection efficiency (66.3%), the cell viability was decreased when compared with chemical transfection methods.

Conclusions: Lipid-based transfection using Lipofectamine® LTX & Plus reagent seems to be an optimal transfection method for primary corporal smooth muscle cells. These data may be helpful for gene therapy studies in the management of erectile dysfunction.

023

PRELIMINARY REPORT ABOUT THE INFLUENCE OF AMBULATORY BLADDER PRESSURE MONITORING DEVICE ON THE ERECTILE FUNCTION

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Introduction: Recently, ambulatory bladder pressure monitoring device has been introduced to monitor the voiding pattern in real life. Moreover, influence of this device on the erectile function is necessary because majority of the neurogenic bladder coexisted with the erectile dysfunction. However, there were little studies considering with this aspect. Therefore we evaluated the influence of the invented device on the erectile function in rabbits.

Materials and Methods: The manufactured intravesical pressure sensor was placed into the intravesical space of each of 3 rabbits. Conventional cystometry was performed and the intravesical pressure was measured by the prototype intravesical pressure sensor at the same time in all of the animals. The measured intravesical pressure by the prototype intravesical pressure sensor

was compared with the measured value by conventional cystometry. The reliability between the two methods was determined using cross-table analysis. And then intracavenous pressure (ICP) was measured in the rabbits with or without invented sensor.

Results: In each of the 3 animals, the index of coincidence was observed as 0.70, 0.79, and 0.77, respectively. This result meant that the intravesical pressure monitoring by the intravesical pressure sensor showed good reproducibility with respect to the continuous intravesical pressure monitoring by conventional cystometry. The ICP of rabbits with the sensors was similar with the rabbits without sensors.

Conclusions: In this study, we demonstrated the reliability of the intravesical pressure sensor compared with the conventional cystometric result. Moreover, the erectile function was maintained when the sensor was placed in the bladder. Further investigation about the long-term influence is necessary for real clinical application.

024

CHARACTERIZATION OF NEURONAL CELL DEATH IN THE MAJOR PELVIC GANGLION FOLLOWING CAVERNOUS NERVE INJURY

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Introduction: Surgical treatments for prostate, bladder and colorectal cancers often lead to neuronal damage and erectile dysfunction (ED). Despite nerve-sparing techniques, ED prevails and preventing neurodegeneration is of great importance. This study aimed to characterize the markers of neuronal injury and apoptosis in the major pelvic ganglion (MPG) following cavernous nerve injury.

Methods: Male Sprague-Dawley rats underwent sham or bilateral cavernous nerve injury (BCNI) and MPGs were isolated 2, 7, 14, 21, 30 and 60 days following BCNI (n=5/group). MPG gene expression analysis by qPCR was performed for injury markers: activating transcription factor 3 (ATF3), glial fibrillary acidic protein (GFAP); apoptotic markers: caspase 1, caspase 3, Bcl2-associated X protein (Bax); and neuronal markers: β -tubulin3 (BT3), tyrosine hydroxylase (TH), vesicular acetylcholine transporter (VACHT) and neuronal nitric oxide synthase (nNOS). Additional injured MPGs were fixed, embedded in paraffin and assessed for apoptosis by TUNEL (n=4/group).

Results: GFAP and ATF3 gene expression were significantly increased in MPGs from 2–21 days following BCNI ($p < 0.05$). Apoptotic markers caspase1, caspase3 and Bax at 2–14 days after BCNI were significantly elevated ($p < 0.05$). Neuronal markers BT3, TH, and VACHT were significantly lower in 2 and 7 day injured MPGs. Furthermore, 2 days after BCNI nNOS gene expression was 50% lower than sham. Apoptotic positive cells were significantly increased in MPGs 7 and 14 days following BCNI (Sham: 0.3 ± 0.12 , 7d: 9.5 ± 1.2 , 14d: 7.9 ± 2.5 , $p < 0.05$).

Conclusions: Markers of neuronal injury and apoptosis are significantly upregulated early following BCNI. Further studies inhibiting the apoptotic pathway at these early time points may provide therapeutic avenues for neurogenic-mediated ED.

025

PELVIC NERVE INJURY LEADS TO INCREASED RHO-KINASE MEDIATED ADRENERGIC VASOCONSTRICTION OF THE DISTAL VAGINA

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Introduction: Female sexual responses rely on innervations from the pelvic plexus which may become damaged during radical hysterectomy. We demonstrated that bilateral pelvic nerve injury (BPNI) leads to increased vaginal adrenergic contractions and impaired vaginal blood flow in rats. This study examined the role of Rho-kinase (ROCK) in the elevated vaginal contractions after BPNI.

Methods: Female Sprague-Dawley rats (12 wks) were divided into sham or BPNI in which nerves from the pelvic plexus were bilaterally crushed. Animals were examined 3, 7, 14, 30 days following BPNI. Distal vaginal strips were contracted to norepinephrine (NE) in the presence/absence of ROCK inhibitor Y-27632. ROCK1, ROCK2, RhoA, and α -smooth muscle actin (ASMA) protein and gene expression were assessed by Western blot and qPCR. Vaginal segments were stained with Masson's trichrome to assess smooth muscle and collagen.

Results: An increase in vaginal contraction to NE was evident 3, 7, 14 days following BPNI ($p < 0.05$). ROCK inhibition normalized NE-induced vaginal contractions after BPNI ($p < 0.05$). Gene expression of ROCK1, ROCK2 was increased 14 days after BPNI and its activator RhoA was also increased at 3 and 14 days compared to sham ($p < 0.05$). Protein expression of ROCK1, ROCK2 and activated RhoA were elevated 3, 14 days after BPNI ($p < 0.05$). A significant decrease in ASMA protein was evident at 7, 14 days after BPNI. Increased collagen in the vaginal wall and a decrease in vaginal epithelium were evident 14 days after BPNI.

Conclusions: Pelvic nerve injury leads to increased adrenergic, rho-kinase mediated tone, and structural changes to the vagina. These findings parallel the phenotype in the penis after cavernous nerve injury and provide us with a possible therapeutic target for neuropraxia-induced vaginal dysfunction.

026

INHIBITION OF RHO-KINASE PRESERVES ERECTILE FUNCTION AND INCREASES NEURONAL OUTGROWTH FOLLOWING CAVERNOUS NERVE INJURY

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Introduction: RhoA and Rho-kinase (ROCK) are implicated in neurite retraction and degeneration after injury. We hypothesize that degeneration of the cavernous nerve (CN) after injury is due to increased RhoA/ROCK signaling in the major pelvic ganglion (MPG). This study aimed to characterize the role of ROCK inhibition in preserving erectile responses, penile contractions and neurite outgrowth following bilateral cavernous nerve injury (BCNI). Methods: Male Sprague-Dawleys rats (12 wks) were separated into sham, BCNI and BCNI treated with Y-27632 (ROCK inhibitor, 5 mg/kg twice daily; n=8/group). 14 days after BCNI, groups

underwent CN stimulation to determine erectile function. Penes were dissected and contractile responses to phenylephrine (PE) and electrical field stimulation (EFS) were assessed. MPG were excised and cultured in reduced growth factor matrigel for 48h and neurite growth was measured. Results: While erectile function was severely decreased in rats with BCNI, daily administration of Y-27632 improved erectile responses 2-fold compared to BCNI ($p<0.05$). Cavernous contractile responses to PE were unchanged in all groups. EFS-mediated penile contractions were significantly lower in BCNI compared to sham. Treatment with Y-27632 increased EFS-mediated contractions 2-fold compared to sham and BCNI penes ($p<0.05$). MPG neurite outgrowth was unchanged in sham and BCNI; however, BCNI+Y MPG had significantly increased growth (S:328±9µm; BCNI:349±14µm; BCNI+Y:405±11µm, $p<0.05$).

Conclusion: Inhibition of ROCK preserved erections, mediated increased neurite growth and increased nerve-mediated penile contractions in BCNI rats. Preventing the activation of RhoA/ROCK signaling in the MPG and CN after injury may inhibit neurodegeneration and post-radical prostatectomy erectile dysfunction.

027

EXPRESSION AND DISTRIBUTION OF THE TRANSIENT RECEPTOR POTENTIAL CATIONIC CHANNEL A1 (TRPA1) IN THE HUMAN CLITORIS - COMPARISON TO MALE PENILE ERECTILE TISSUE

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Introduction: The transient receptor potential cationic channel ankyrin 1 (TRPA1) belongs to a family of membrane channels permeable to most monovalent and divalent cations. These channels have been suggested to act as mechano- and pain sensors and play a role in neurotransmission in various tissues, including the urogenital tract. Up until today, only a very few studies have addressed the expression and distribution in the male and female genital tract. The present study aimed to evaluate in the human clitoris the localization of TRPA1 in relation to neuronal nitric oxide synthase (nNOS) and vimentin. Materials and Methods: Using immunohistochemical methods (double-labeling technique, laser fluorescence microscopy), the expression and distribution of TRPA1 was examined in sections of the human clitoris and male penile erectile tissue (Corpus cavernosum penis = CCP).

Results: In the clitoral tissue, immunosignals related to TRPA1 were observed in basal epithelial cells and slender varicose nerve fibers transversing the subepithelial space. These fibers were also characterized by the expression of nNOS. To a certain degree, in clitoral epithelial cells, TRPA1 was found co-localized with vimentin, a specific feature of interstitial cells of mesenchymal derivation. In human CCP, immunoreactivity for TRPA1 was seen in nerves transversing the cavernous sinusoidal spaces and running alongside small arteries, these nerves also displayed the expression

of the vesicular acetylcholine transporter protein (VACHT). Varicose nerves containing nNOS or VIP were not immunoreactive for TRPA1.

Conclusion: The findings indicate that TRPA1 might be involved in the NO-mediated afferent sensory transmission in the clitoris while, in CCP, a role for TRPA1 in cholinergic signaling might be assumed.

028

ANTHOCYANIN EXTRACTED FROM BLACK SOYBEAN INDUCES APOPTOSIS OF DU-145 CELLS IN VITRO AND INHIBITS XENOGRAPH GROWTH: INVOLVEMENT IN MODULATING EXPRESSION OF BAX/BCL-2 AND P53

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This study investigated the effects of anthocyanins extracted from black soybean, which have antioxidant activity, on apoptosis in vitro (in hormone refractory prostate cancer cells) and on tumor growth in vivo (in athymic nude mouse xenograft model). The growth and viability of DU-145 cells treated with anthocyanins were evaluated using the 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay and apoptosis was evaluated by DNA laddering. Immunoblotting was performed to evaluate changes in expression of p53, Bax, Bcl, and androgen receptor (AR), and prostate specific antigen (PSA). To study the inhibitory effects of anthocyanins on tumor growth in vivo, DU-145 tumor xenografts were established in athymic nude mice. DU-145 cells (2×10^6) were injected subcutaneously into the flank of 6-week-old male BALB/c nude mice after treatment with anthocyanin (8mg/kg) for 2 weeks. Tumor dimensions were measured every day using calipers and volumes were calculated according to the formula (length*width²)/2. Anthocyanin treatment of DU-145 cells (a) increased apoptosis in a dose-dependent manner, (b) caused G2-M phase cell cycle arrest, (c) significantly decreased p53 and Bcl-2 expression (with increased Bax expression), and (d) significantly decreased PSA and AR expression. In the xenograft model, anthocyanin-treated mice had significantly less tumor growth. This study suggests that anthocyanins from black soybean inhibit the progression of prostate cancer in vitro and in a xenograft model.

029

CRITICAL ANALYSIS OF CIRCADIAN RHYTHMS IN TESTOSTERONE PRODUCTION IN OLDER MEN

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Introduction: Conventional wisdom suggests that serum testosterone (T) level measurement is best conducted in the morning (AM). This study aimed to define the magnitude of the difference between morning and afternoon T levels and to assess the impact of aging on this variation.

Methods: We reviewed our institutional database for men who had AM (before 10am) and PM (after 2pm) total T (TT) levels within 3 months of each other. We excluded patients with a prior

orchiectomy, with T levels <100ng/dL and those with a history of androgen deprivation therapy. The differences in TT level between AM and PM were measured and were stratified by decade age increase (<50 years, 51–60y, 61–70y, 71–80y, >80y).

Results: 367 men with mean age = 59±14y had an age distribution of: 26% <50y, 17% 51–60y, 34% 61–70y, 18% 71–80y, 5% ≥80y. In the entire cohort, there were no differences between mean AM and PM TT levels (411±242 vs 392±265, p=0.15). Both AM (r=–0.12, p=0.03) and PM (r=–0.14, p=0.01) TT values were negatively associated with age. AM TT levels by age category were: 466±341, 379±213, 405±200, 391±172, 341±167 respectively (p=0.09). PM TT by age category were: 468±386, 358±184, 370±218, 369±188, and 347±151 respectively (p=0.03). There were no significant differences between mean AM and PM levels by age groups: –1, p=0.9; 22, p=0.2; 35, p=0.10; 22, p=0.3; and –6, p=0.8 respectively. While 60% of men had no meaningful difference (–100 to +100) between AM and PM levels, 11% had >200ng/dl decrease, 13% 100–200ng/dl decrease, 7% 100–200ng/dl increase and 9% >200ng/dl increase.

Conclusion: This study did not detect a significant circadian variation in TT levels based on aging. However, 14% had a significant difference between AM and PM levels (≥200 decrease or increase).

030

SEXUAL HEALTH IN MALE CHILDHOOD CANCER SURVIVORS: A REPORT FROM THE CHILDHOOD CANCER SURVIVOR STUDY (CCSS)

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Purpose: Assess sexual health in adult male survivors of childhood and adolescent cancers and to identify potential risk factors for sexual dysfunction

Patients and Methods: Male survivors in the CCSS cohort were asked to complete the Male Health Questionnaire (MHQ) that included the validated International Index of Erectile Function (IIEF) and Sexual Function Questionnaire. Demographic data were also collected. Survivors were compared to sibling controls with descriptive statistics and multivariable analyses.

Results: Of those offered participation, 1622 survivors (40%) and 271 siblings (25%) completed the MHQ. All siblings and 99.2% of survivors reported sexual activity in their lifetime (p=0.23), with 92% of survivors and 97.4% of siblings reporting sexual activity alone or with a partner in the past year (p=0.0001). Types of sexual experience by partners were similar in survivors compared to siblings. As measured by the IIEF Erection Function domain (IIEF-EF), survivors reported greater erectile dysfunction (ED) than siblings (RR 2.66; 95%CI 1.41, 5.01) among subjects with recent

(past four weeks) sexual activity. In addition to older age, testicular radiation dose ≥ 4 Gy (RR 2.16; 95% CI 1.05, 4.42), history of surgery involving the spinal cord or sympathetic nerves (RR 2.83; 95% CI 1.34, 5.96), and history of prostate surgery (RR 6.20; 95% CI 3.50, 10.97) were all significantly associated with ED in the survivors. Survivors (5.9%) also had a higher likelihood than siblings (2.3%) of receiving treatment for ED (RR 2.63; 95% CI 1.17, 5.93).

Conclusion: Adult male survivors of childhood cancer are sexually active but have greater risk for erectile dysfunction as measured by IIEF-EF and self report of treatment for ED.

031

THE CUPID TRIAL: CARDIOLOGY CLINIC PATIENTS ARE AT HIGH RISK FOR ED, LUTS, & EJD

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Objective: To assess the prevalence of erectile dysfunction (ED), lower urinary tract symptoms (LUTS), and ejaculatory dysfunction (EJD) in a cross sectional cardiology clinic population.

Material and Methods: We assessed a cohort of consecutive hormonally naïve men within a cardiology clinic via IIEF–15, IPSS, ADAM, previous ED treatment questionnaires, and serum total testosterone (T), estradiol (E) and sex hormone binding globulin (SHBG). Data were collected on patient age, BMI, and co-morbidities. We compare our data with age matched community cohorts.

Results: 102 patients, mean age of 67 years, had a mean BMI of 32. The total moderate to severe ED prevalence was 73.5%. ED based on IIEF–6 scores was categorized as mild (16–21), moderate (7–15), and severe (<7) in 7%, 18%, and 56% of patients respectively. Of all men with ED, 39% had tried PDE–5i and 4% had tried a VED. Only 28% had a current satisfactory response (mild to no ED) from treatment (10 PDE–5i, 1 VED). Moderate to severe ED prevalence by age was 54% for ages 40–59, 67% for 60–69, and 90% for 70+. Comparative risk of moderate to severe ED for our cohort compared to the NHANES community data was 3.6, 1.5 and 1.3 for ages 40–59, 60–69, and 70+ respectively. EJD was found in 37%. LUTS based on AUA symptoms scores were mild (1–7), moderate (8–19), and severe (>19) in 39%, 44%, and 15% of patients respectively. Comparative risks for EJD and LUTS were both 1.4 compared to the general population (Blanker et al, Trueman et al).

Conclusions: Male patients with cardiac disease have a greater prevalence of ED, EJD, and LUTS compared to age-matched peers from community cohorts. Of those with moderate to severe ED, nearly 75% had either failed or not undergone any treatment.

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032

PRELIMINARY RESULTS FROM PROSPECTIVE LONG-TERM FOLLOW-UP USING VALIDATED QUESTIONNAIRES OF CHILDREN WHO UNDERWENT PROXIMAL HYPOSPADIAS REPAIR

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Purpose: Little evidence exists on long-term follow-up after proximal hypospadias repair. Pubertal growth affects cosmesis and functional outcomes, and full psychosocial maturation occurs after puberty. We sought to characterize the long-term urologic outcomes, including urinary symptoms, quality of erections, and patient sexual satisfaction, using validated questionnaires in patients who underwent repair of proximal hypospadias as a child. **Methods:** Retrospective review of medical records of patients who underwent proximal hypospadias repair between 1992 and 1997 was conducted. Patients > 18 years were prospectively contacted and emailed an anonymous survey link which included the following validated questionnaires: American Urological Association Symptom Index (AUASI), Self-Esteem and Relationship Questionnaire (SEAR) and International Index of Erectile Function Questionnaire (IIEF). Location of hypospadias, type of repair and complications were included.

Results: Initial chart review included 58 patients with contact information available for 19. Of these, 17 consented to participate. The mean age at time of survey was 21 years with a mean follow-up of 18.4 years. Ten patients (59%) had complications requiring further surgical interventions for an average of 2.2 procedures per patient. Ten patients have prospectively completed the questionnaires. Ninety percent of patients report standing to void. All ten patients void from the end of their penis. Cosmetically, eight patients are satisfied and two dissatisfied. All patients were satisfied with the quality and hardness of their erections. Residual penile curvature was reported in 50% with only one patient reporting > 60 degrees of curvature. Mean AUASI was 3 (scale 0-35) and 80% were either delighted or pleased with their urinary quality of life. Mean SEAR scores (scale 0-100) were 90.5 for sexual relationship, 91.1 for confidence and 90.7 for total score. The mean IIEF scores included an erectile function score of 29.5 (scale 0-30), intercourse satisfaction score of 13.3 (scale 0-15) and overall satisfaction score of 9.0 (scale 0-10).

Conclusions: Overall, patients who underwent surgical repair of proximal hypospadias had a complication rate of 59% and required an average of 2.2 interventions per patient. The majority of patients post-puberty were satisfied with the cosmetic appearance as well as the quality of erections. In addition, most patients reported a high quality of life related to urinary symptoms.

033

PENILE FRACTURE: 9-YEAR EXPERIENCE AT A TERTIARY CARE CENTER

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Introduction: Penile fracture is a rare urological emergency defined as traumatic rupture of the tunica albuginea of the corpus cavernosum, occurring mainly in the young adult. Fracture can extend to involve the corpus spongiosum and urethra. Urethral injury is rare and associated with 9–20% of all fractures. Patients

and **Methods:** A retrospective review identified 39 patients with clinical features of penile fracture presenting to a tertiary referral center between June 2004 and May 2013.

Results: Mean patient age was 34.9 yrs. Average time to presentation was 40.3 hrs (range: 0.5hr – 9 days). Mechanism was coital injury in 32 (82%) patients. Diagnosis was clinical +/- imaging. 3 had a retrograde urethrogram for suspected urethral injury, while 11 had penile ultrasound and 1 had an MRI. All proceeded to surgery. 5 (13%) had a degloving incision while 34 (87%) had a penoscrotal incision. 32 (82%) patients had penile fracture and 7 (18%) had solely venous injury. Average tunical tear was 1.9 cm. Of the confirmed fractures, 4 (13%) had associated urethral injury. 3 cases had injury to the corpora bilaterally, and of these 100% were associated with urethral injury. At post-op follow-up (mean duration 43 days), 4 (13%) patients reported complications—2 wound infections, 1 new-onset erectile dysfunction, and 1 urethral stricture. There was a trend toward increased risk of complication for fracture with associated urethral injury ($p=0.06$). There was no difference in complication rate for degloving versus penoscrotal incision ($p=0.34$).

Conclusions: Penile fracture is primarily a clinical diagnosis of which the standard treatment is immediate surgical repair. Urethral injury should be suspected in cases of bilateral corporal rupture and may be associated with increased morbidity.

034

PRIAPISM AND OVERACTIVE BLADDER SYMPTOMS IN SICKLE CELL DISEASE: IS THERE A LINK?

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Introduction and Objective: Enuresis and overactive bladder symptoms (OAB) are prevalent in children with sickle cell disease (SCD). It is uncertain if these OAB symptoms persist in adulthood. Priapism is also highly prevalent in SCD. Nitric oxide dysregulation is involved in the pathophysiology of both SCD-associated priapism and voiding dysfunction. We sought to see if there is an association between priapism and OAB symptoms in men with SCD.

Materials and Methods: Structured questionnaires were administered to 40 men with hemoglobin SS who attended the Sickle Cell Unit (SCU), University of the West Indies, Jamaica. A past history of enuresis and age of cessation and a current history of enuresis were determined. The Overactive bladder questionnaire—short form (OAB-q SF) was used to assess bothersome bladder symptoms and quality of life (QOL). A history of ischemic priapism was determined.

Results: 40 men with homozygous SCD of mean (s.d.) age 29.7 ± 6.4 years were recruited. 20 men (mean age 28.4 ± 6.8) gave a history of ischemic priapism (stuttering and/or major) and 20 men did not have a history of priapism (mean age 31 ± 5.9 years). 20 men had a positive history of enuresis, of which 11 also had history of priapism. 4 men (10%) had a persistent history of enuresis. There was no association of history of priapism and history of enuresis. Mean age (s.d.) of cessation of enuresis was 12.6 ± 4.4 years. There was no difference in OAB-q SF bother and OAB-q SF QOL scores by priapism history status (median with IQR 10, 32 vs 8.3, 16.3) and (median with IQR 95.4, 4.6 vs 96.9, 9.2) respectively.

Conclusion: Priapism and enuresis are common in SCD. There is no association of priapism and voiding symptoms. Large scale studies will be required to further investigate this possible association.

035

THE POSITIVE IMPACT OF EXERCISE ON ENDOTHELIAL AND SEXUAL DYSFUNCTION IN SEDENTARY OVERWEIGHT INDIVIDUALS

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Introduction: The positive impact of chronic exercise upon endothelial and sexual dysfunction (SD) in sedentary, overweight and obese individuals is not well explored. Von Willebrand factor, a marker of endothelial function, as well as sexual function questionnaires were measured in participants in an exercise study following an overweight and obese cohort at baseline and 24 weeks. **Methods:** Sedentary overweight and obese participants exercised for 30-60 minutes 5 days per week for 24 weeks, while controls remained sedentary. Male sexual function was determined via IIEF questionnaires and females received FSFI questionnaires. BMI, waist circumference and plasma osteoprotegerin (OPG), C reactive protein (CRP), VWF antigen (VWF:Ag) and VWF propeptide (VWFpp) were measured in a subset of participants (17 control, 87 exercise). **Results:** VWF:Ag significantly decreased in the exercise cohort compared to control (-14.2 +/-20.6 vs 4.9+/-20%, U/dL +/- SD, $P=0.001$). OPG increased less (82 +/- 110nM vs 650 +/-880 nM, $P=0.02$) while VWFpp and CRP were not different. A subset completed the questionnaires. In males, there was a significant increase in erectile function scores (N=7, 14.9 +/-14.3 baseline vs 27.4 +/- 2.8 at 24 weeks, $P<0.05$). Satisfaction domain scores as well as responses to Q3 and Q4 were significantly improved. Females (N=12) also had a modest significant improvement (29.3 +/-5.1 baseline vs 31.3 +/- 3.8 at 24 weeks, $P<0.05$). **Conclusions:** In an unhealthy overweight population, 24 weeks of exercise caused measureable improvements in endothelial function as well as sexual function, despite individuals still being overweight. This is the first study to evaluate both sexual function and von Willebrand Factor in an older overweight cohort that is exercising.

036

SERUM HIGH-SENSITIVITY C-REACTIVE PROTEIN LEVELS AND RESPONSE RATE TO 5 MG TADALAFIL ONCE DAILY IN PATIENTS WITH ERECTILE DYSFUNCTION AND DIABETES

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Purpose: Erectile dysfunction (ED) in patients with diabetes is related to endothelial dysfunction. We studied the relative importance of high-sensitivity C-reactive protein (hs-CRP) level in patients with ED and diabetes and determined whether hs-CRP level predicts the response to treatment with 5 mg tadalafil once daily.

Materials and Methods: We enrolled 102 men (age, 40-60 years) with diabetes who were suffering from ED. All patients completed the International Index of Erectile Function (IIEF) questionnaire and were given 5 mg tadalafil daily. The IIEF was repeated 3 months later. A control group was composed of 88 healthy subjects of similar age. The IIEF and serum hs-CRP levels in patients and healthy controls and in patient responders and non-responders to 5 mg tadalafil once daily were compared.

Results: Average age was 53.2 ± 7.5 years in patients and 55.6 ± 8.1 years in healthy controls ($P = 0.655$). The mean duration of diabetes was 54.3 ± 17.2 months. The mean IIEF and hs-CRP level was 12.1 ± 6.3 and 0.21 ± 0.17 mg/dL in patients and 28.2 ± 2.3 and 0.09 ± 0.07 mg/dL in the controls, respectively (PIIEF = 0.000, PCRCP = 0.031). After tadalafil treatment, 71 patients (69.6%) achieved an erection sufficient for sexual intercourse, whereas 31 (30.4%) did not. The average age of the tadalafil non-responders was 56.2 ± 7.7 years and that of the responders was 51.3 ± 6.5 years ($P = 0.065$). Mean hs-CRP levels were 0.31 ± 0.15 and 0.14 ± 0.10 mg/dL in non-responders and responders, respectively ($P = 0.028$).

Conclusions: Serum hs-CRP was significantly higher in patients with ED and DM than in patients without ED. A significant correlation was observed between serum hs-CRP levels, the degree of ED, and responsiveness to tadalafil.

037

SEVERITY OF ERECTILE DYSFUNCTION AND DEPRESSION IN HEALTHY MIDDLE-AGED MEN

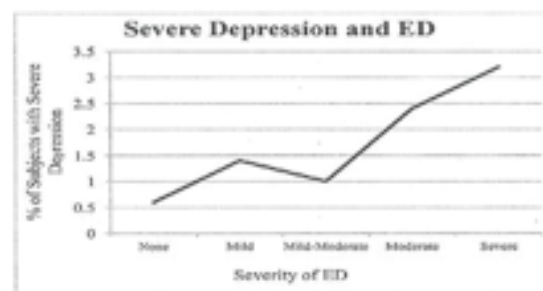
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Introduction: Erectile Dysfunction (ED) is an important marker for cardiovascular risk and is associated with other diseases, including depression. We aim to evaluate the association between ED and depression using validated questionnaires in a large population of healthy middle-aged law enforcement officers.

BASELINE CHARACTERISTICS

Age	46.91 ±5.44 years
Body Mass Index	30.32±4.47
Total Testosterone	344.19±119.39 ng/dL
SHIM<22	26.8% (530 subjects)
PHQ-10	6.4% (126 subjects)
Anti-depressant Medication	3.8% (75 subjects)
Total Testosterone<300	37.4% (740 subjects)
Diabetes	5.8% (115 subjects)



Methods: We evaluated 1,978 male participants of the Law Enforcement Cardiac Screening Program. ED was defined as a score <22 on The Sexual Health Inventory for Men (SHIM). Depression was defined as a score of ≤ 10 on the Patient Health Questionnaire-9 (PHQ-9). We analyzed the relationship using a chi square analysis.

Results: The mean age of this population was 46.9 ± 5.4 years with a mean body mass index of 30.3 ± 4.5 and mean testosterone of 344.9 ± 119.4 ng/dL. Within the population 26.8% (530) screened positive for ED on the SHIM and 6.4% (126) indicated depression on the PHQ-9. Of men with ED, 15.5% (82) screened positive for depression, while of those without ED, 3.0% (44) were positive for depression ($p=0.001$). A significant relationship between the severity of ED and the severity of depression ($p=0.001$) exists.

Conclusion: We observe a correlation between ED (as defined by SHIM score) and depression (as defined by PHQ-9) in this otherwise healthy population. These findings support widespread screening for depression among all patients with symptoms of ED.

038

ERECTILE DYSFUNCTION AFTER RECURRENT ISCHEMIC PRIAPISM IN PATIENTS WITH AND WITHOUT SICKLE CELL DISEASE: A COMPARATIVE ANALYSIS OF RISK FACTORS

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Introduction: ED is a known complication of recurrent ischemic priapism (RIP) with a documented high risk in sickle cell disease (SCD) patients, but the factors associated with this outcome uniquely relevant to this population are unclear.

Materials and Methods: We evaluated 26 RIP pts [12 SCD and 14 non-SCD (13 - idiopathic, 1 drug-related)] presenting to our clinic from Nov 2010 to Aug 2013 using priapism-specific, IIEF and SHIM questionnaires.

Results: 6 of 12 (50%) SCD (mean age 24.3 ± 6.9 yrs) vs 4 of 14 (28.6%) non-SCD pts (mean age 38.4 ± 13.5) had ED ($p=0.26$). 4 of 12 (33.3%) SCD vs 1 of 14 (7.1%) non-SCD had severe ED ($p=0.09$). For daily or every other day priapism episodes, 5 of 11 (45.5%) SCD vs none of 6 non-SCD ($p<0.05$) had ED. For priapism >1 yr, 6 of 12 (50%) SCD vs. 4 of 10 (40%) non-SCD ($p=0.64$) had ED. For episodes regularly lasting >2 hrs, ED was found in 2 of 3 (66.7%) SCD vs 1 of 8 (12.5%) non-SCD ($p=0.07$). Of those reporting major priapism episodes (>4 hrs), 3 of 8 (37.5%) SCD vs. 2 of 9 (22.2%) non-SCD ($p=0.49$) had ED. Of those receiving penile treatments (i.e., aspiration, irrigation, surgical decompression) for major priapism episodes, 3 of 14 (21.4%) pts [1 of 5 (20%) SCD vs 2 of 9 (22.2%) non-SCD ($p=0.92$)] had ED, compared with 2 of 3 (66.7%) (all SCD) not receiving such treatments ($p=0.12$) having ED.

Conclusion: RIP patients with SCD are more likely to experience ED overall and at a greater severity level compared to non-SCD RIP patients. The increased likelihood of experiencing ED in SCD is associated with a greater frequency and duration of priapism episodes. Irrespective of RIP etiology, higher ED rates are associated with disease duration of >1 year and lower ED rates after major priapism episodes are associated with penile treatments rather than with observation alone.

039

SYSTEMIC INFLAMMATION IS NOT DIRECTLY ASSOCIATED WITH ERECTILE DYSFUNCTION IN AGING MEN. COMMUNITY BASED CROSS-SECTION STUDY

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Introduction: The importance of endothelial dysfunction & inflammation in erectile dysfunction (ED) has been well documented and it may share its pathogenesis with atherosclerotic vascular disease. The serum high sensitive C-reactive protein (hsCRP) is a non-specific marker of systemic inflammation, and well established risk factor in atherosclerotic vascular disease. Hence, we evaluated the association between hsCRP and ED in aging men.

Patients and Methods: A multistage stratified design was used to recruit a random sample of 1510 men aged 45 years or older in Chuncheon, Korea. Men with the urologic(except for BPH) or neurologic diseases that could cause erectile dysfunction were excluded. Also, if men had been recently medical conditions that could cause or suppress inflammation such as infection or NSAID use, these men were excluded. The serum hsCRP levels were analyzed by continuous variable, top 10 percentile, top 20 percentile and top 25 percentile. ED was defined as an International Index of Erectile Function-5 (IIEF-5), analyzed by severe (5-7 points), moderate (8-11 points), mild (12-21 points), and normal (>21 points).

Results: Finally 338 men were recruited. Mean age was $69.1 (47-93)$ years, and mean serum hsCRP was $0.277 (0.035-7.769)$ mg/L. Men with mild, moderate, and severe ED were 100(30.1%), 16(4.8%) and 110(33.1%), respectively. No statistically significant association was observed between the hsCRP levels and IIEF-5 ($p>0.05$). Also, in analyses including covariates such as age, body mass index, hypertension, diabetes mellitus, hyperlipidemia, alcohol, smoking and voiding symptom, the serum hsCRP level was not significant risk factor.

Conclusion: The serum hsCRP levels were not associated with ED. Systemic inflammation may be not directly associated with ED in aging men.

040

QUALITATIVE ASSESSMENT OF MEN RECEIVING PENILE IMPLANT EDUCATIONAL INFORMATION: THE DISCONNECT BETWEEN PATIENT AND SURGEON PERCEPTIONS

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Introduction: Penile implant surgery is associated with high levels of patient satisfaction. Despite this, many men who are excellent candidates never opt for this procedure. Patient Education Seminars (PES) presented by surgeons are designed to increase knowledge of ED treatment options.

Methods: Two qualitative studies were conducted to gain insights for quantitative survey development. Study 1 (S1) interviewed men who attended a PES. Goals of S1 were to understand why patients attend a PES and actions taken after the PES. Study 2 (S2) interviewed physicians and patients after discussions about ED and penile implants, with the goal to understand attitudes towards penile implant surgery.

Results: For S1, 28 men were interviewed 20–180 days after attending a PES. Themes that emerged: most men had experienced severe ED for several years, had tried PDE5i, were hesitant about implant surgery due its surgical nature, lacked an understanding of how the implant worked, and were concerned about cost or insurance coverage. Despite a request to learn more about implants, most patients were never contacted following the PES. In S2, 11 physicians and 10 patients were interviewed. Emergent themes: there existed a disconnect between the physician's and patient's perspective; patients were generally dissatisfied with the interaction. Physicians focused on the practical, logistical facts, while patients were often felt shocked by the discussion, demonstrating the importance of a surgeon employing both an intelligence and an emotional quotient during patient education.

Conclusion: Follow-up and providing education in a more empathic fashion may translate into increased understanding of penile implants as an option for chronic ED patients.

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041

LIBIDO AND SEXUAL FUNCTION AND SATISFACTION SCORES IN THE INFERTILE MALE

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Introduction: Few studies have looked at libido and its association with sexual satisfaction and erectile function in infertile men. This study sought to review data on sexual quality of life indicators as well as sexual and relationship function in men presenting for the treatment of infertility.

Materials and Methods: After IRB approval, we retrospectively reviewed 500 surveys completed by men who presented to an infertility clinic between 2003–2011 and evaluated their International Index of Erectile Function (IIEF) domain scores with self-reported decreased libido.

Results: Men who felt they had decreased libido were more likely to have low confidence in their erections (19.6% vs 3.0%, $p < .001$). These men were also more likely to feel their erections were not hard enough for penetration (8.8% v 2.1%, $p < 0.001$), were more likely to feel they could not maintain their erection after penetration, (9.8% v 1.9%, $p = 0.0002$), and were more likely to feel they could not keep an erection to completion of intercourse (11.8% v 1.7%, $p < 0.0001$).

Overall, men with decreased libido were more likely to be unsatisfied with their sexual life (10.9% vs 1.1%, $p < 0.001$). There was a highly significant difference in the total combined IIEF score between patients with decreased libido (20.4) in comparison to those without decreased libido (23.4, $p < 0.0001$).

Conclusions: Decreased libido is associated with greater dissatisfaction of sexual health and erectile dysfunction in infertile men. Decreased libido may be an important qualifier in predicting men's assessment of their sexual and erectile function.

042

PREVALENCE AND CLINICAL CHARACTERISTICS OF HYPOACTIVE SEXUAL DESIRE DISORDER IN A CLINIC-BASED COHORT OF MEN

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Extensive work has been conducted in the area of female hypoactive sexual desire disorder (HSDD), however the literature on HSDD in males is comparatively lacking. In particular, prevalence rates and demographics for HSDD in men remain unclear. A retrospective review of 371 male patients who completed the Patient Health Questionnaire (PHQ-9), International Index of Erectile Function (IIEF), and Androgen Deficiency in the Aging Male (ADAM) questionnaires at a first time visit to the urology clinic was conducted. 81 low-desire men were identified from this group as those who scored ≤ 4 on the IIEF sexual desire domain (SDD). Of these, men who had both total T (TT) and free T (FT) checked on the same day as questionnaire completion were identified ($n=74$). Mean age of this cohort was 51.8 ± 13.0 years, BMI 27.4 ± 6.6 kg/m². Mean TT was 379.5 ± 203.4 ng/dl, FT 7.9 ± 6.7 ng/dl. Mean questionnaire scores were as follows: PHQ-9 5.7 ± 4.8 , ADAM 5.0 ± 2.3 . HSDD(+) men were determined as those patients who reported low desire on IIEF, had a positive ADAM, but were not depressed (PHQ-9 score ≤ 4), and not hypogonadal (TT ≥ 350 ng/dl). 14/74 patients (18.9%) were found to meet the criteria for HSDD above. Compared against the HSDD(-) group ($n=60$), HSDD(+) men were significantly younger, had a significantly lower BMI, higher T and FT levels, and scored higher on IIEF erectile and orgasmic function domains. Of note, an independent measure of distress or bother was not available. However both HSDD(-) and HSDD(+) men reported low scores on IIEF overall satisfaction domain, 3.7 ± 1.9 and 4.4 ± 2.3 for HSDD(-) and HSDD(+), respectively. Male HSDD potentially affects a sizable proportion of men reporting low sexual desire. Further investigation into the nature of HSDD in men is warranted.

043

PRIAPISM: REVIEW OF ETIOLOGIES AND MANAGEMENT OF 79 CASES AT A SINGLE INSTITUTION

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Objectives: To determine the most common etiologies and management strategies for the treatment of priapism in a contemporary cohort of patients.

Methods: We conducted a retrospective review of consecutive priapism cases at a single institution from January 2008 to June 2013 from an inpatient consult database. Baseline characteristics including age, drug-use, and blood dyscrasias were gathered. Patients were then grouped by priapism etiology, initial management, and surgical management. A subgroup of patients

who presented on multiple occasions was analyzed to evaluate if etiology and management characteristics differed from baseline. Results: Of the 49 patients, median age was 36 years (27–46). Median duration of erection was 11.0 hours (4.3–23.1). Fourteen patients (17.7%) had repeat presentations, resulting in a total of 79 uniquely presenting cases of priapism. Twenty-two cases (27.9%) resulted from sickle cell disease, 19 (24.1%) were idiopathic, 15 (19.0%) were attributed to psychotropic medications, and 13 (16.4%) were secondary to injection therapy for erectile dysfunction. A majority of the cases—52 (65.8%)—were initially treated with irrigation/aspiration plus phenylephrine injections, while 7 (8.7%) were definitively treated with PO medications only. Ten total cases (12.7%) required surgical shunts, 5 of which resolved with a single operation and 4 of which required at least two operations. Conclusions: The most common causes of priapism in this contemporary case series were sickle cell disease, idiopathic, and psychotropic medications. For men who failed nonoperative management, surgical shunt procedures were very effective, although half of these men required two or more operations.

044

PREVALENCE OF DELAYED EJACULATION AND PENILE CURVATURE IN AN UNSELECTED PRIMARY CARE POPULATION

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Introduction: The exact prevalence of penile curvature and orgasmic dysfunction in the general male population is unknown. Prior studies estimating prevalence were based on patients presenting to a urology clinic, introducing the possibility of a selection bias. We aimed to corroborate these numbers with an unselected patient population.

Patients and Methods: We performed a survey of patients presenting to 5 separate primary care offices over a two week time period. All patients were asked to participate and not selected for a particular presenting complaint. Patients verbally consenting to the survey were queried regarding the presence of penile curvature and the time it took them or their male partner to reach orgasm. Delayed orgasm was defined as requiring greater than 20 minutes to reach orgasm, irrespective of patient bother. IRB approval was obtained prior to the study.

Results: Overall 412 patients completed the survey. Of the 239 female respondents, 34 (14%) stated it took over 20 minutes for their male partner to reach orgasm. Only 8% of females reported their male partner having penile curvature. Of the 173 males, 36 (21%) reported taking greater than 20 minutes to reach orgasm. The same percentage (21%) of men also reported having penile curvature. Of the 37 men reporting penile curvature, only 4 (11%) reported this interfering with sexual activity and 4 reported pain associated with the curvature.

Conclusions: Delayed orgasm and penile curvature occur in approximately 14–21% of men presenting to the primary care physician.

045

DIAGNOSIS AND TREATMENT OF POST-PROSTATECTOMY ERECTILE DYSFUNCTION AND URINARY INCONTINENCE IN YOUNG PRIVATELY INSURED PATIENTS, 2007-2010

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Introduction: Diagnosis and treatment rates for long-term erectile dysfunction (ED) and urinary incontinence (UI) after radical prostatectomy (RP) are well described in the Medicare population, but patterns in younger patients are less well understood. Patients: We analyzed patients age 18-64 from Marketscan, a nationwide database of claims from private health insurance plans. Patients with a diagnosis of prostate cancer who underwent open (ORP) or minimally invasive RP (MIRP) from 2007-2010 and had ≥ 1 year follow-up were included.

Methods: Primary outcome measures were long-term ED and UI, defined by ICD9 code ≥ 12 months post-RP or a related CPT code (penile prosthesis and intracorporal injection for ED; sling, artificial urinary sphincter (AUS), and urethral bulking for UI). Multivariate logistic regression was performed.

Results: 21,159 patients with a mean age at RP of 57.1 years and median follow-up of 28 months were analyzed. MIRP was performed in 90%. Post-operative ED was present in 3,928 (19%) patients. ED treatment included injection therapy in 1,428 (7%) and penile prosthesis in 281 (1%). Post-operative UI was present in 1,656 (8%). UI treatment included sling in 369 (2%), AUS in 158 (1%) and bulking agent in 107 (1%). On multi-variate analysis, older age at prostatectomy and pre-operative diagnosis of diabetes, hypertension, and ED were predictive of long-term ED ($p \leq 0.001$). Predictors of long-term UI were older age at prostatectomy and pre-operative diagnosis of diabetes or hypertension ($p \leq 0.01$).

Conclusion: ED and UI are significant causes of morbidity after RP, even in a relatively young population. Rates of diagnosis and treatment were lower than published rates of patient-reported ED, suggesting that this condition is under-treated in this population.

046

PREVALENCE OF DEPRESSION, DECREASED LIBIDO AND ERECTILE DYSFUNCTION AMONG INFERTILE MEN

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Introduction: This study sought to evaluate the characteristics of men presenting to an infertility clinic and the association between sexual quality of life (QOL) indicators as well as sexual satisfaction and function scores in the infertile male.

Materials and Methods: After IRB approval, we retrospectively reviewed 500 surveys, completed by men presenting to an infertility clinic between 2003–2011. Surveys included social, emotional and sexual health QOL domains as well as International Index of Erectile Function Domain scores (IIEF).

Results: Of the 500 men surveyed, the mean age of the men was 34.6 years old. The mean testosterone level was 376 (SD =

156.7), FSH level 6.4 (SD= 6.5) and LH level was 4.8 (SD= 3). Over 77% of the men reported having problems with erection at least "sometimes" and up to 7% reported having problems "always". Sexual aids were used by 7% of men; 30% used lubrication. 97% of the men were employed and 13% had a family history of infertility. Of the men surveyed, 22% reported decreased libido, 30% had decreased energy, 14% felt a decreased enjoyment in life, and 18% reported depression. Men who reported decreased libido, decreased enjoyment in life, and feelings of depression were more likely to report lower scores on all 5 domains of the IIEF compared to men who did not report having these feelings ($p<0.05$). In addition, all those parameters were significantly associated with decreased sexual satisfaction scores, with decreased libido having the highest association with low IIEF scores.

Conclusion: Erectile dysfunction (ED) is prevalent among young infertile men. Decreased libido, depression, and decreased energy are prevalent among infertile men and are strong predictors of ED among this group.

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VALIDATION OF THE PATIENT GLOBAL IMPRESSION OF IMPROVEMENT (PGI-I) FOR PENILE PROSTHESES

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Currently there is no consensus on preferred means of evaluation of patients after surgical placement of an inflatable penile prosthesis (IPP). Many self-assessment questionnaires exist, but none have been specifically targeted towards the IPP patient population. It has been suggested that simplicity and brevity are important features when designing a patient self-assessment questionnaire. We propose using and validating the patient global impression of improvement (PGI-I) to assess patient improvement after placement of an IPP.

An IRB approved prospective trial was performed. Patients who elected to have a three piece IPP and participate in the study were enrolled. Exclusion criteria included previous IPP placement or infection. Postoperatively patients completed a Sexual Health Inventory for Men (SHIM), Erectile Dysfunction Inventory of Treatment Satisfaction (EDITS), and Patient Global Impression of Improvement (PGI-I) at 3, 6, and 12 months. Pearson correlation coefficient (PCC) was used to compare scores over time.

63 patients were enrolled. At 3 months PGI-I correlated with EDITS with a PCC of 0.83 ($p<0.01$) and with SHIM with a coefficient of 0.73 ($p<0.01$). PGI-I at 6 months correlated with EDITS with coefficient of 0.74 ($p<0.0001$). The PCC at 6 months between the PGI-I and SHIM was 0.41 ($p=0.03$). At 12 months the PCC between PGI-I and EDITS was 0.83 ($p<0.01$), and the PCC between PGI-I and SHIM was 0.61 ($p<0.01$). Overall correlation of all data points showed a correlation of SHIM to EDITS of 0.76, SHIM to PGII of 0.62, and PGII to EDITS of 0.82 ($p<0.01$).

Overall PGI-I does appear to correlate with both SHIM and EDITS. Further investigation and follow-up is needed to confirm this hypothesis.

048

NON-RESPONDERS, PARTIAL RESPONDERS AND COMPLETE RESPONDERS TO PDE-5I THERAPY ACCORDING TO IIEF CRITERIA: VALIDATION OF AN ANCHOR-BASED, TREATMENT RESPONDER CLASSIFICATION

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Despite widespread use of the International Index of Erectile Function (IIEF) in ED (erectile dysfunction) research, no validated criteria for classifying ED treatment responders in clinical trials or patient management settings exist. We developed and validated a new measure for classifying treatment response to PDE5 therapy in men with ED using an integrated database of 17 clinical trials in 3252 men with ED randomized to placebo or tadalafil. The 3-way responder classification was based on endpoint IIEF-EF and baseline to endpoint achievement of minimal clinically important difference (MCID) in the IIEF-EF (change of > 4 points): complete responders (EF ≥ 26 ; MCID + or -); partial responders (EF <26 ; MCID+); and non-responders (EF <26 ; MCID-). Treatment assignment was used to test discriminant validity. Convergent validity was examined using the MCID for the diary-based Sexual Encounter Profile (SEP) item 3 ("Did your erection last long enough for you to have successful intercourse?") and Global Assessment Question (GAQ) ("Has the treatment you have been taking over the past study interval improved your erections?"). Chi-square, Cochran-Armitage trend tests, and logistic regression were used to examine outcome associations. The measure performed well in all pre-specified tests of validity. In complete responders, 89% were in the active treatment group and the measure was highly associated with SEP MCID and GAQ respectively (SEP OR=14, 95% CI 11-17; GAQ OR=50, 95% CI 39-88; complete vs. non-responders). We developed and validated a novel method of defining an ED treatment responder based on multiple IIEF criteria and other measures (SEP, GAQ) for validation. The results have implications for understanding results of clinical trials in ED, and in monitoring response to treatment in the clinic.

049

THE SELF-ESTIMATION INDEX OF ERECTILE FUNCTION - NO SEXUAL INTERCOURSE (SIEF-NS): A MULTIDIMENSIONAL SCALE TO DIAGNOSE ERECTILE DYSFUNCTION IN THE EVENT OF NO SEXUAL INTERCOURSE

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Background: A new subcategory of Erectile Dysfunction (ED) was recently recognized, and defined as the inability to achieve or sustain an erection in the event of no sexual intercourse occurrence (ED-NS). We developed a new questionnaire, Self-estimation Index of Erectile Function-No Sexual Intercourse (SIEF-NS) to better evaluate the EF in this special patient subpopulation.

Objective: To validate the reliability, sensitivity and specificity of SIEF-NS.

Methods: Three groups of ED-NS patients and one group of normal controls were enrolled in this study.

SIEF-NS was designed as a 10-item questionnaire to assess the EF of ED-NS patients from five dimensions, including sexual libido, general EF, nocturnal penile erection, EF during audio-video sexual stimulation, and EF in sexual fantasy with potential sexual partners (PSP) without actual sexual intercourse. SIEF-NS was also used to evaluate the treatment effect on ED-NS patients. The performance of SIEF-NS was investigated by using statistical analysis including component analysis, discriminant, construct validity, Receiver Operating Characteristic (ROC) Curve.

Results: EF by autonomic response (factor 1) and EF with PSP (factor 2) are the two factors/domains with eigenvalues greater than 1.0. High degree of internal consistency was observed for the two domains and the 10-item questionnaire (Cronbach's alpha values: 0.871 for 10 items, 0.84 for factor 1, and 0.823 for factor 2). SIEF-NS demonstrated adequate construct validity and high sensitivity (0.925) and specificity (0.829) to diagnose ED-NS. The EF scores of ED-NS patients post treatment showed significant improvement ($P < 0.05$).

Conclusions: SIEF-NS can be used to identify ED-NS patients and detect treatment-related EF changes in ED-NS patients.

050

IMPACT OF DM AND ELEVATED BMI ON ENDOTHELIAL FUNCTION IN MEN WITH ED.

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Purpose: Type 2 diabetes mellitus (DM) is associated with an increased risk of cardiovascular disease (CVD) from vasculopathy due to hyperglycemia and endothelial dysfunction. While DM is increased in patients with higher body mass index (BMI), this association is not linear. The purpose of this study was to determine the relationship between DM, BMI and endothelial dysfunction in men with erectile dysfunction (ED).

Methods: Data from 144 men evaluated for ED ($n=14$ DM; $n=130$ non-DM) were retrospectively reviewed. Patients with ED were identified as having a peak systolic velocity of ≤ 25 cm/s on Duplex Doppler US. The reactive hyperemia index (RHI), a measurement of endothelial dysfunction (when < 1.67), was recorded via peripheral artery tonometry (PAT). Vibration pulse threshold was monitored using Biothesiometry.

Results: Patients with DM had increased incidence of ED (86% vs 53%, $p < 0.04$) and endothelial dysfunction (64% DM; 46% non-DM, $p < 0.03$). Testosterone, DHEA, estradiol, SHBG, and cholesterol levels were similar amongst the groups. HgA1c was higher in men with DM ($7 \pm 0.5\%$; $6 \pm 0.1\%$ non-DM, $p < 0.02$). Patients with ED had an increased BMI (30 ± 0.7 kg/m²; 27 ± 0.7 kg/m² non-DM, $p < 0.02$), as did those with endothelial dysfunction (RHI < 1.67 had BMI $= 30 \pm 0.9$ kg/m²; RHI > 1.67 had BMI $= 28 \pm 0.6$ kg/m², $p < 0.04$). Elevated BMI correlated with worse endothelial dysfunction ($R^2 = 0.04$, $p < 0.03$). Penile sensory nerve dysfunction was worse in men with DM (Relative amplitude of 9 ± 1 vs. non-ED $= 7.6 \pm 0.5$) and was unaffected by BMI.

Conclusions: Men with DM and elevated BMI exhibit increased rates of vasculogenic ED as well as worse endothelial dysfunction as defined by PAT. These data are important when evaluating patients presenting with ED, since both vasculogenic ED and abnormal endothelial function are harbingers of CVD.

051

PENILE DOPPLER ULTRASOUND EVALUATION OF PATIENTS WITH ERECTILE DYSFUNCTION, HYPERTENSION AND/OR DIABETES MELLITUS: A SINGLE INSTITUTIONAL ANALYSIS

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Introduction: Penile Doppler (PD) ultrasound provides an objective measure of a patient's erectile hemodynamic status during erectile dysfunction (ED) evaluation. The objective of this study was to evaluate PD ultrasound parameters and treatment in patients with hypertension (HTN) and/or diabetes mellitus (DM).

Materials and Methods: Between July 2008 and February 2013, 462 patients were evaluated for ED with PD ultrasound. Among this cohort, 108 patients had DM/HTN (23.4%), 157 patients had HTN (34.0%) and 34 patients had DM (7.4%). Variables analyzed included demographics, incidence of arterial disease (peak systolic velocity < 30 cm/s) and venous leak (end diastolic velocity > 5 cm/s), clinical response, need for phenylephrine injection and treatment. Patients with DM/HTN, HTN and DM were compared to a population control group ($N=462$; ED of all etiologies) using student t-test and Fisher's exact test.

Results: Patients with HTN were older (60.4 ± 11.3 vs. 56.5 ± 12.9 years, $p=0.0008$) and were more likely to be smokers (54.1% vs. 42.6%, $p=0.02$). Patients with DM/HTN were less likely to be Caucasian (37.0% vs. 52.6%, $p=0.004$) and had significantly worse arterial disease (70.3% vs. 55.0%, $p=0.004$). This did not hold true for patients with only HTN (59.2%, $p=0.40$) and DM (50.0%, $p=0.60$). Patients with DM/HTN were less likely to be treated with PDE-5 inhibitors (13.9% vs. 22.5%, $p=0.049$) and there was a trend towards either having or being recommended a penile prosthesis (21.3% vs. 14.1%, $p=0.08$).

Conclusions: Patients with DM and HTN have a cumulative effect of comorbidities leading to worse arteriogenic disease compared to patients with only DM and HTN. These patients are less likely to achieve satisfactory outcomes with oral agents and are more likely to require more aggressive treatment.

052

THE PENILE DOPPLER PARAMETERS AND CLINICAL RISK FACTORS IN MEN WITH ERECTION HARDNESS SCORE 3-4 AFTER INTRACAVERNOUS INJECTION

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Introduction and Objectives: The objective of this study was to determine the best penile Doppler (PD) parameters and clinical risk factors for predicting EHS 3-4, an erection able to penetrate, after intracavernous injection.

Methods: Among a total of 462 patients who underwent a PD ultrasound after intracavernous injection between July 2008 and February 2013, 221 (48%) patients achieved EHS 0-2 and 241 (52%) patients achieved EHS 3-4. The PD parameters and the distribution of erectile dysfunction (ED) risk factors were compared between the two groups.

Results: Compared to patients with EHS 0–2, patients with EHS 3–4 were more likely to be younger (54 years vs 59 years, $P<0.001$) and showed significantly larger artery diameter (0.8 mm vs 0.6 mm, $P<0.001$), higher peak systolic velocity (PSV) (45.5 cm/s vs 28.5 cm/s, $P<0.001$), and lower end diastolic velocity (EDV) (0.4 cm/s vs 1.6 cm/s, $P<0.001$). EHS 3–4 was significantly associated with the presence of Peyronie's disease ($p=0.01$), and the absence of hypertension ($p=0.001$) or prostate cancer (all treatment modalities) ($p=0.007$). Multivariable logistic regression analyses showed artery diameter (OR=14, $p<0.001$) and PSV (OR=1.03, $p<0.001$), but not EDV or resistive index, were independently associated with EHS 3–4. Patients with a history of hypertension or prostate cancer were half as likely to have an EHS 3–4 compared to patients without a history of hypertension or prostate cancer. (OR=0.5, 95%CI 0.3–0.8 $p=0.005$; OR=0.5, 95%CI 0.3–0.9 $p=0.03$, respectively).

Conclusions: The artery diameter and PSV are the strongest predictors of EHS 3–4, and hypertension and prostate cancer negatively affects EHS after intracavernous injection. Penile Doppler continues to be an indispensable tool to evaluate men with ED.

053

DUAL ENERGY COMPUTED TOMOGRAPHY: NOVEL TECHNIQUE IN STAGING PEYRONIE'S DISEASE

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Introduction: Medical and sexual histories, along with physical examination, are generally sufficient in establishing the diagnosis of Peyronie's Disease. Penile curvature is then assessed with the aid of home photographs or with pharmacologically induced erection in the office setting. Often, non-invasive imaging such as penile Doppler ultrasound (PDU) is of value to further identify and measure penile plaque prior to treatment or surgical intervention.

Aims: We report on the use of dual energy computed tomography (DECT) as a novel imaging technique for evaluating Peyronie's Disease.

Methods: We retrospectively reviewed DECT of seven patients with clinically diagnosed Peyronie's disease. All patients were imaged using a Siemens Somatom Definition Flash CT scanner. DECT peak tube potentials of 100 and 140 kVp were used. Data was reconstructed on a multimodality Work–Place (Siemens) using CT syngo Post–Processing Suite software. Results were correlated with physical examination and PDU findings.

Results: All 7 patients demonstrated calcific penile plaques which were able to be characterized with DECT. Large palpable plaques and non-palpable microcalcifications were easily shown. DECT results correlated well with both physical exam and ultrasound findings.

Conclusion: We have demonstrated the ability of DECT to characterize Peyronie's plaque. Future studies will assess sensitivity of DECT in detecting smaller plaque and microcalcification. This information can potentially be used for earlier medical intervention, to monitor therapy, and assist in pre-operative planning. Additionally, given operator dependence and lack of wide spread availability of PDU, DECT may provide a useful tool for community physicians to diagnose Peyronie's disease.

054

IS IT USEFUL PREMATURE EJACULATION DIAGNOSTIC TOOL (PEDT) SCORES TO CLASSIFY PREMATURE EJACULATION SYNDROME INTO WALDINGER'S SUBGROUPS OF PE?

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Introduction: Premature ejaculation diagnostic tool (PEDT) is a brief, multidimensional validated instrument for diagnosis of premature ejaculation (PE). We employed and compared PEDT score in Waldinger's 4 subgroups of PE (lifelong, acquired, natural variable, and premature like dysfunction) to identify predictive value of PEDT score for classifying subgroups of PE.

Material and Methods: E-mails were sent to population based sample of males aged 20–59. Participants were asked to complete a questionnaire requesting detailed medical and sexual histories, which included questions from PEDT. Waldinger's 4 subgroups were defined by self-assessment with detailed information. Lifelong PE or acquired PE was regarded as clinically significant subgroup of PE, contrast to natural variable PE or premature-like dysfunction.

Results: E-mails were opened by 1,206 recipient and a total of 443 subjects with mean age of 39.3 ± 10.1 years were included, a response rate of 36.7%. Incidence of PE and their mean PEDT score were; no PE (79.5%, 6.7 ± 4.0), any PE (20.5%, 11.2 ± 3.8), lifelong PE (2.9%, 15.5 ± 3.4), acquired PE (7.0%, 11.2 ± 3.7), natural variable PE (7.4%, 10.4 ± 3.1), and premature like dysfunction (3.2%, 9.0 ± 2.9). Sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) of PEDT ≥ 11 for diagnosis of self-reported PE was 53.8%, 95.5%, 75.3% and 88.8%. Among self-reported PE patients, optimal cut-off value of PEDT scores for diagnosis of clinically significant PE was 13. Sensitivity, specificity, PPV, NPV of PEDT ≥ 13 for detection of clinically significant subgroup were 47.7%, 74.5%, 63.6% and 60.3%.

Conclusion: This population-based cross-sectional survey shows that PEDT is useful for screening of self-reported PE. However, the power of classifying PE into subgroups is low.

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PRIAPISM IMPACT PROFILE (PIP) QUESTIONNAIRE: DEVELOPMENT AND PRELIMINARY EVALUATION

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Introduction: No validated clinical instruments exist for quantifying the physical and emotional impact of experiencing priapism.

Materials and Methods: We created a 12-question self-administered questionnaire to survey symptom impact in 3 domains: quality of life (QoL) (4 questions, addressing mental health, emotions, and daily activity impact), sexual function (SF) (5 questions, addressing sexual satisfaction, desire, confidence, partner relationship, and erectile ability, and physical impact (PI) (3 questions, addressing penile pain and deformity). Higher scores indicate poorer experience in the respective domain. We asked participants (clinic

patients from Jan 2011 to Aug 2013) to assess the clarity and importance of each question on the PIP, and correlated PIP scores to priapism history data and IIEF and SHIM questionnaire scores. Results: Twenty-eight patients (mean age 33.4 +/- 13.6 yrs), of whom there were 11 with sickle cell disease and 1 with sickle cell trait, completed the questionnaire. Patients with priapism episodes >2 hours had higher mean QoL, PI, and total scores ($p = 0.09$, <0.05 , 0.09 , respectively). Patients with daily episodes had lower QoL scores ($p < 0.05$), while those with "no to mild ED" had lower QoL, SF and total scores ($p = 0.09$, <0.05 , <0.05 , respectively). Eighty-five and 74% of patients rated questions as being clear and important, respectively.

Conclusion: Prolonged priapism episodes and increased ED severity were associated with lower PIP scores in QoL, SF, PI domains. Lower QoL scores, which indicate less impaired QoL, in patients with frequent priapism episodes suggests adaptation to living with priapism. Ongoing investigation using PIP version 2.0 is expected to yield a refined instrument for use in research and clinical practice.

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UROLOGIST PRACTICE PATTERNS IN THE MANAGEMENT OF PREMATURE EJACULATION IN KOREA; A NATIONWIDE SURVEY IN 2012

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Introduction: There is no baseline data about the 'real-practice' patterns of urologist in the management of the patients with premature ejaculation (PE) in Korea, although PE has become a topic of increasing interest. We investigated how urologists manage PE in Korea.

Materials & Methods: A probability sample was taken from the Korean Urological Association Registry. A specially designed questionnaire was e-mailed to the randomly selective 2421 urologists.

Results: Most urologists (44.4%) treated less than 3 patients with PE per week, while only 2.7% of urologists treated more than 20 patients. For the diagnosis of PE, most urologists considered a multidimensional approaches; intravaginal ejaculatory latency time (63.4%), presence of inability to delay ejaculation (61.7%), problem of relationship with sexual partner (43.8%), and the questionnaire such as PE diagnostic tool (42.5%) and perceptual self-diagnosis

by patient's himself (23.5%). Selective serotonin receptor inhibitors (SSRIs), especially dapoxetine, were the most preferred medical management option for 91.5% of respondents. Topical anesthesia (54.7%), PDE-5 inhibitors (40.2%) and tricyclic antidepressant (27.3%) were also preferred. More than half of the respondents (51.2%) had the positive perception about the role of surgical treatment such as selective dorsal nerve resection (SDNR), while only 16.9% of respondents had negative perception. The majority of urologists (72.9%) had performed SDRN, and the 53.9% of them reported that the patients satisfied the surgical outcomes in most case.

Conclusion: The majority of our respondents diagnosed PE by multidimensional approaches. Most urologists believed that the medical treatment with SSRIs is essential and effective. They also believed that surgical treatments have a significant role.

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THE HETEROGENEITY OF SEXUAL MEDICINE SERVICES ON THE WORLD WIDE WEB

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With advancements in the digital age, patients are seeking health care services on the Internet. We reviewed how large academic centers promote sexual medicine services on their websites, then comparing this to sexual medicine clinics in large cities.

We used the US News & World Report™ top 50 Ranked Hospitals for Urology, cohort, and queried the website of each institution for sexual medicine services. Data was gathered on the types of providers and conditions treated. By comparison, a Google™ search using the term "Erectile Dysfunction" was performed for all sexual medicine practices in the five largest US cities.

Sexual medicine services were advertised on 27/50 (54%) academic center websites. 26 (52%) had a urologist with a focus on sexual medicine, while 13 (26%) advertised sexual medicine services incorporating a variety of medical disciplines. 25 (50%) offered information on post-prostatectomy erectile dysfunction, and 23 (46%) advertised treatment for other sexual health conditions. Only 9 (18%) addressed a psychogenic component to sexual health. Meanwhile, 125 sexual medicine practices were identified in the five largest cities and only 48 (38%) were associated with a urologist. 56 (45%) advertised a multi-disciplinary approach to sexual health and 68 (54%) promoted treatment options for post-prostatectomy ED. 94 (75%) did not have an affiliation with an academic institution.

There is considerable disparity regarding the prevalence of sexual medicine health services advertised on patient-oriented websites, with non-academic practices being more numerous than leading academic institutions. Urologists tend to be in the minority of all providers promoting sexual medicine services on the Internet. Our findings also highlight the heterogeneous nature of academic sexual health programs.

058

3-D COMPARATIVE ANALYSIS OF THE TITAN INFLATABLE PENILE IMPLANT, THE AMS INFLATABLE PENILE IMPLANT AND THE HUMAN CORPUS CAVERNOSUM

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Objectives: Intricate anatomical comparative analysis of the distal corpus cavernosum and the tips of the penile implant have yet to be reported. We report our experience using a three dimensional (3D) scanner to reconstruct corporal casts and compare them to two penile implants.

Materials & Methods: The silicone tipped Titan Coloplast® inflatable penile prosthesis (IPP) and the AMS® 700 CX IPP prosthesis along with four cadaveric phalluses were harvested using polyurethane molding. We analyzed the IPP tips, exit tubing, and the diameter of the tubing and prosthesis along side the molds. 3D scans were completed and analyzed using Leios Mesh software, and GOM Inspect software.

Results: The 3D scans demonstrated the mean human corporal radii 1mm from the distal tip to be 5.03 (3.04–6.42) mm, which is an obtuse angle. The silicone tipped Titan penile prosthesis spherical radius at the same level was 3.42 mm while the tip of the AMS prosthesis had a radius of 3.11 mm. It was observed that the trajectory of the cavernosa appeared curvilinear and the distal ends appeared blunt. This analysis was confirmed by 3D mapping. The Titan penile implant exit tubing is at 1.23 degrees while the AMS exit tubing is at 33.51 degrees and the radius of the AMS tubing was 5.21mm while the Titan exit tubing was 3.42mm thick. **Conclusions:** The use of cadaveric cavernosal molds in combination with the 3D scanner allowed us to accurately image the corpus cavernosum. Our findings suggest that anatomically accurate corporal tips appear to be relatively blunt and that the new Titan® silicone tip penile prosthesis and the AMS 700 CX are similar in implant tip shape. The exit tubing diameter and angle from differs considerably, which may affect ease of seating the proximal ends.

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MEASUREMENT OF ENDOTHELIAL DYSFUNCTION VIA PERIPHERAL ARTERIAL TONOMETRY PREDICTS VASCULOGENIC ERECTILE DYSFUNCTION

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Purpose: Endothelial cell dysfunction is associated with cardiovascular disease and vasculogenic erectile dysfunction (ED). Measured via Peripheral Artery Tonometry (PAT), endothelial dysfunction in the penis is an independent predictor of future cardiovascular events. The role of quantitating endothelial dysfunction in the evaluation of men with ED has not been established.

Materials/Methods: A total of 142 men were retrospectively assessed for ED using penile duplex ultrasonography (US) and PAT (EndoPAT 2000). ED was defined as peak systolic velocity (PSV) of ≤ 25 cm/s obtained 15 minutes following vasodilator injection. The reactive hyperemia index (RHI), a measurement of endothelial dysfunction in medium/small arteries and the Augmentation Index

(AI), a measurement of arterial stiffness, were recorded via PAT.

Results: Penile duplex US separated men into those with ED (n=111) and without (n=31). The cohort with ED had a PSV of 21 ± 1 cm/s (left cavernous artery) and 22 ± 1 cm/s (Right). The control group without ED had values of 39 ± 2 cm/s (Left) and 39 ± 2 (Right). Given the potential for altered endothelial function in diabetes mellitus, we confirmed that hemoglobin A1c, urinary microalbumin, and vibration pulse threshold were not different. RHI in patients with ED (1.85 ± 0.06) was significantly decreased compared to controls (2.15 ± 0.2) ($p < 0.05$). The AI was unchanged when examined in isolation, and when standardized to heart rate.

Conclusions: Measurement of endothelial function with EndoPAT differentiates men with vasculogenic ED from those without. RHI could be used as a non-invasive surrogate in the assessment of vasculogenic ED and to identify those patients with higher cardiovascular risk.

060

REPRODUCIBILITY OF FORCE OF EJACULATION ASSESSMENT USING CATEGORICAL SCALE BASED ON VIDEO RECORDING

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Intro: Ejaculation is coordinated at the spinal level by motor central pattern generators (CPG). It is unknown if CPG for ejaculation has reproducible pattern of activation in same patient. Objective grading scale of ejaculation has not been well studied. We evaluated the reproducibility of 4-point scale developed based on analysis of over 200 videos of ejaculation to address individual changes of CPG of ejaculation.

Methods: 50 subjects (S) with no evidence of sexual dysfunction participated in the study. they were asked to give 3 semen samples with at least 2 days in between according to an IRB-approved protocol. During each setting the subjected graded the force of ejaculation using the 4 point score system. 0=no ejaculation, 1=overflow, 2=below or 3=passed the belly-button.

Results: 50 S underwent 68 self-recorded cycles. The mean age is 39 years (STD 16.03) with a range of (18–65). During 1st event 32 S graded ejaculation as a level 3, 24 as 2 and 12 as 1. On 2nd recording 30 S graded their ejaculation as 3, 28 as 2 and 10 as 1. During the 3rd recording, 32 graded ejaculation as grade 3, 24 as 2, and 12 as 1. 70% of the cycles were at the same level during all 3 reported ejaculation episodes, and 97% of the cycles were a complete match or differed by one point. There were no statistical differences in the variability between any of the cycle. In S that underwent more than one self-reported measures there were no statistical differences in their force. (Chi Square $P < 0.001$). **Conclusion:** Ejaculation is coordinated independently at the spinal level by the CPG, leading to a similar and reproducible force of ejaculation within the same individual. Our developed 4-point scale of ejaculation is a reliable and reproducible tool that can be used to assess and evaluate disorders of ejaculation.

061

COMPARISON OF SATISFACTION OF ORGASM AND FORCE OF EJACULATION IN A PROSPECTIVE TRIAL

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Introduction: Orgasmic and ejaculatory disorders remains poorly understood and studied. No validated and reproducible tools are available to assess orgasmic satisfaction. In addition, little is known about the relationships between orgasmic quality and ejaculatory force. We therefore performed a prospective trial to characterize orgasmic satisfaction and ejaculatory force.

Methods: 50 subjects with no evidence of sexual dysfunction participated in the study. A 10-point self-assessment scale was used to rate the quality of the orgasm at each different episoded according to an IRB-approved protocol. The force of ejaculation used a 4-point scale, 0-ejaculate, 1-overflow, 2-below, and 3 above the umbilicus.

Results: The mean age is 39 years (STD 16.03) with a range (18-65). The scores assessing the quality of orgasm demonstrated consistent reproducibility across the three different time points. 59% percent of the scores assessing quality of orgasm were within one point of each other, 80.8% of the scores were 2 points or less. There were no significant differences in the quality of orgasm between each time point. The quality of orgasm was significantly correlated with the force of ejaculation (Spearman's rho 0.41, $p < 0.01$).

Conclusions: The self-assessment of orgasm is a reliable and reproducible tool that can be used to assess and evaluate disorders of arousal, orgasm. Increased force of ejaculation was significantly correlated with higher levels of orgasm quality. The development of better evaluation tools can help improve the treatment of orgasmic and ejaculatory disorders.

062

BIOPSY IS CONTRAINDICATED IN THE MANAGEMENT OF PENILE CALCIPHYLAXIS

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Introduction: Calciphylaxis, a rare obliterative small vessel vasculopathy associated with diabetes mellitus (DM), end-stage renal disease (ESRD), portends a poor prognosis. Because penile involvement is rare, agreement on appropriate diagnosis and management is unclear.

Methods: Medical records of three penile calciphylaxis patients from our institution were evaluated. Data collected included age, history of DM, ESRD, and hemodialysis (HD) status, serum calcium (Ca), Ca x phosphorous product (C x P), parathyroid hormone (PTH), performance of biopsy, presence of non-penile cutaneous lesions, intervention, survival, and time from diagnosis to death. PubMed Search for relevant publications from 1995 to 2012 was performed to identify case reports of penile calciphylaxis that provided the same clinical data obtained from the 3 patients from our institution.

Results: A total of sixteen patients were identified in the literature and in our institution with clinical data of interest. Overall, 10/16 (62.5%) patients identified with penile calciphylaxis had a penile

biopsy, and 7/10 (70%) experienced disease progression, while only 3/10 (30%) stabilized. Mean time to death in this patient population was short, approximately 6.5 months, regardless of type of intervention.

Conclusion: Based on the results of our study, we argue that conservative measures should be employed as first line therapy for penile calciphylaxis. More importantly, secondary to likely resultant progression of necrosis, penile biopsy is not only unnecessary for diagnosis of penile calciphylaxis, but is also harmful and contraindicated.

063

WHAT IS THE ROLE OF BLOOD VISCOSITY IN THE ERECTILE DYSFUNCTION?

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Introduction: Blood viscosity also might affect the occurrence of erectile dysfunction (ED) and cardiovascular diseases. We evaluated the relationship between blood viscosity and other diagnostic variables in the patients with ED.

Materials and Methods: The patients of 80 with ED were included in this study prospectively. CBC, blood chemistry, testosterone, blood viscosity (BIO-VISCO, Jeonju, Korea), color Doppler ultrasonography, and questionnaire of the IIEF were measured after informed consent form. The patients were divided 4 groups. Group 1 was plasma level of testosterone more than 4.0 ng/mL. Group 2 was plasma level of testosterone under 4.0 ng/mL. Group 3 was patient taking the medication for the treatment of hyperlipidemia. Group 4 was not taking the medication for hyperlipidemia. Correlation analysis was performed to see interrelationship among diagnostic variables such as Hb, Hct, triglyceride and blood viscosity.

Results: Blood viscosity was higher in the ED patients with hyperlipidemia than normolipidemic patients. Hct and Hb were significantly related with blood viscosity ($P < 0.001$). Blood viscosity was significantly related with between Group1 and Group2 in shear rate 100 ($P < 0.04$). Hct and Hb were significantly related with blood viscosity in Group 3 (shear rate exclude 100, $P < 0.04$). Group 3 blood viscosity was significantly related with triglyceride in shear rate 100 and 1,000 ($P < 0.05$). Hct and Hb were significantly related with blood viscosity in Group 4 ($P < 0.001$).

Conclusions: ED was related with blood viscosity in some shear rates. Blood viscosity could be a marker for ED evaluation, which may be related with cardiovascular risk.

064

THE AFFECT OF VARICOCELE ON SPERM PRODUCTION IN MEN WITH AZF-C MICRODELETION

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Introduction: We sought to determine if varicocele alters sperm presence (both in ejaculate and at surgery) in men with AZFc microdeletion.

Materials & Methods: Men presenting for fertility evaluation from 2008–2012 having both AZFc microdeletion and varicocele were identified via a prospective database. Data were analyzed for varicocele, semen and hormonal parameters, and findings at the time of microsurgical testicular sperm extraction (MT).

Results: 20 men were identified with AZFc microdeletions: 17 were azoospermic, 11 had a varicocele. 3 men had bilateral varicoceles. Of varicoceles, 11 were grade 1, and 3 were grade 2. The mean FSH for men with varicocele was 17.36 ± 9.05 IU/L, LH: 7.55 ± 4.22 IU/L, T: 11.49 ± 6.07 nmol/L; this was similar for men without varicocele. 2 underwent varicocele repair, and 1 subsequently converted from azoospermia to oligospermia. Of the 3 oligospermic men, 1 had a varicocele. 9 men underwent MT: 4 had a varicocele and 5 did not. In men with a varicocele, spermatids were found in 2 and spermatozoa in 0. In men without varicocele, spermatids were found in 1 and spermatozoa were found in 2.

Conclusions: 55% of men with AZFc microdeletions also have varicoceles. Varicocele repair improves semen parameters in some men. The presence of varicocele at MT does seem to negatively impact sperm retrieval rates.

065

SURGEON SELECTION FOR PENILE IMPLANT SURGERY IS LARGELY INTERNET DRIVEN

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Introduction: Surgeon selection for penile implant surgery continues to evolve as patient centered selection increases due to internet availability. Patients with ED who are considering implant surgery utilize internet, phone consultation, referrals, and word of mouth, and logistical considerations when choosing an implant surgeon.

Patients and Methods: Surveys were used with 200 consecutive patients in one practice between 1/7/10 and 6/5/12 to consider their choices with regard to surgeon choice. They were asked whether they went to and considered only one surgeon, or “shopped” and considered multiple. If several surgeons were considered, they were queried as to how the decision was made, and what resources were most influential in making that decision. **Results:** 28% of patients surveyed considered only one surgeon, overwhelmingly due to proximity and pre-existence in that practice. 72% had considered multiple surgeons. Internet was the decisive factor in 64%, the most cited resource was Google then Youtube as search engines. Forums were 2nd internet influence, the most cited were Franktalk.com then HealthBoards.com. The 3d in Internet influence was reviews, such as Healthgrades, Vitals, Wellness, and UCompareHealth.com. The next decisive factor was physician personality based on phone consultation, in 12%. For the rest, cost was most important for 10%, location for 8%, and word of mouth for 7%.

Conclusion: Physician selection is an evolving as information is more accessible via the internet. Ability to create an internet presence and create patient comfort with phone calls remains most influential to patients.

066

A PROSPECTIVE EVALUATION OF PENILE MEASURES AND GLANS PENIS SENSORY CHANGES AFTER PENILE PROSTHESIS SURGERY

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Purpose: Evaluate changes in penile sensitivities, length and girth after inflatable penile prosthesis (IPP).

Materials and Methods: From 8/2012 to 1/2013 patients undergoing penile implant surgery were invited to participate. Study aims were to assess changes in glans penis sensation, erect penile length and circumference 6 weeks and 6 months after IPP. Inclusion criteria: “de novo” IPP. A week before surgery, penile length & circumference (inches) and glans biothesiometer readings were recorded 15 minutes after Trimix induced erection. Same measures were taken at postoperatively week 6 and month 6. Statistical analysis: paired-t tests.

		Mean	95% Conf Int	Median	IQR	p
Glans Sensation	Pre	15.6	14.2-17	15.5	8, 22	
	6-Weeks	14.5	14-15.1	13.5	12, 16.5	0.46
	6-Months	15.1	14.2-16	13	10, 20	0.72
	comparisons between 6-weeks and 6-months p:					0.35
Erect Penile Length	Pre	5	4.8-5.1	5	4.6	
	6-Weeks	5.3	5.2-5.4	5	5, 6	0.000
	6-Months	5.2	5.1-5.3	5	5, 6	0.042
	comparisons between 6-weeks and 6-months p:					0.289
Erect Penile Circumference	Pre	4.6	4.3-4.9	4	4, 5	
	6-Weeks	4.7	4.6-4.8	5	4, 5	0.0001
	6-Months	4.9	4.8-5	5	4.75, 5	0.0006
	comparisons between 6-weeks and 6-months p:					0.04

Results: 99 underwent IPP implantation, 86 met eligibility criteria and 62 agreed to participate in this observational study. Cohort: Median (IQR) Age 69 (66,73) yrs. Erectile dysfunction secondary to HTN in 41 (66%). Peno-scrotal approach in all cases. Amperage from Glans biothesiometer readings showed statistically significant shorter readings than elbow biothesiometer preoperatively, 6 weeks and 6 months after surgery ($p < 0.001$ for all). Table shows frequency statistics: all variables and endpoints. No significant sensory difference in the glans penis after IPP. However, compared to pre IPP Trimix induced erections, penile length and circumference were greater after IPP ($p = 0.04$ & $p = 0.001$, respectively).

Conclusions: We observed significant increments in penile length and girth after IPP without significant changes in sensory conduction.

067

TIMING OF INTERVENTION IS IMPORTANT IN IMPLANTATION OF PENILE PROSTHESIS INTO SCARRED CORPORAL BODIES

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Purpose: Insertion of inflatable penile prosthesis (IPP) into scarred corporal bodies is difficult. Before cavernotomies and down sized implants, one-year reoperation survival was 50%. We investigate current survival & importance of surgical timing.

Methods: 62 corporal fibrosis patients with IPP insertion. 30 had IPP within 4 months of priapism (N=14) or removal of infected IPP (N=48). 32 had IPP after 4 months. We monitored reoperation rate, complications & patient complaint of “not long enough.”
Technique: Backward cutting scissors, Carrion–Rossello & Uramix Cavernotomes employed in all cases to drill tunnels into scarred corpora. Downsized implants usually (79%) placed particularly after infection removal because of proximal stenosis. Dilatation was more difficult distally in post priapism.

Intraoperative Complications	≤ 4 mo. (n = 30)	> 4 mo. (n = 32)
Urethral laceration	0	1 (3%)
Can't dilate one side	0	1 (3%)
Proximal Corporal Perforation	12 (40%)	12 (38%)
Distal Corporal Perforation	1 (3%)	2 (6%)
Crossover proximal or distal	4 (13%)	4 (13%)
Post-operative Complications	≤ 4 mo.	> 4 mo.
Infection	0	2 (7%)
"penis not long enough"	14 (47%)	25 (79%)
Urethral cylinder erosion	0	1 (3%)
Impending cylinder erosion	2 (7%)	4 (13%)

Results: All implants in first group successful. 2 required reoperation for impending cylinder erosion. In the late group 2 cases unsuccessful: urethral injury & inability to dilate one side. Reoperation required 7 times (26%). Intraoperative perforation/crossover occurred in both groups and was corrected. The early group had less intraoperative & post-operative complications & fewer length complaints (p<0.05). See attached table.
Conclusion: While successful implantation of corporal fibrosis patients is improved, timing of the intervention is important. Patients operated within 4 months of the event stimulating fibrosis had fewer complications & fewer reoperations.

068

PSEUDO-MALFUNCTION OF COLOPLAST TITAN INFLATABLE PENILE PROSTHESIS WITH OTR PUMP
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Introduction: We have recently identified a type of pseudo-malfunction of the Coloplast Titan Inflatable Penile Prosthesis (IPP) with One-Touch Release (OTR) pump, and wanted to further define and describe this phenomenon.
Materials and Methods: We retrospectively reviewed a consecutive series of 500 patients with refractory organic erectile dysfunction, who were implanted with a Coloplast Titan IPP with an OTR pump over a roughly four-year period.
Results: All patients were implanted using standard techniques, either via an infrapubic or scrotal approach. Post-operative follow-up visits were scheduled at 2 weeks, 6 weeks, 6-month intervals, and as needed. Twenty-seven patients returned for a follow-up visit, complaining that their IPP would not inflate, and that the pump bulb felt “hard.” Examination of these patients revealed that their IPP was working normally; however, the inflate-deflate valve disc had become stuck in the deflate position. Very firm pressure had to be applied to the pump bulb in order to move the valve disc into the inflate position. Once this had been accomplished, the device would inflate and deflate normally. Thirteen additional patients reported this phenomenon to us, but were able to apply enough pressure on the pump bulb to rectify it.
Conclusion: The inflate/deflate valve disc in the Coloplast Titan OTR pump can occasionally get stuck in the deflate position. Patients may notice an inability to inflate the device, and may return

to have this issue evaluated. In all cases we have encountered, firm pressure on the pump bulb caused the valve to shift into the inflate position, and the device worked properly thereafter. Patients should be informed of this issue, and of the way in which it can be rectified.

069

SUSTAINED COMPLIANCE WITH PROPHYLACTIC ANTIBIOTIC GUIDELINES IS POSSIBLE WITH IMPLEMENTATION OF A SIMPLE PROTOCOL IN UROLOGIC PROSTHETIC SURGERY
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Introduction: GU prosthetic surgical infections can have disastrous consequences for patients and substantially increase costs to the medical system. One of the core tenants of the surgical care improvement project (SCIP) is the timely administration of appropriate antimicrobial prophylaxis (AMP). We have previously reported on our implementation of a simple protocol, which dramatically improved our compliance with SCIP guidelines. We wished to examine whether this high rate of compliance persisted, since no feedback system to maintain constant vigilance was put in place at the same time.
Patients and Methods: The most recent consecutive inflatable penile prostheses and artificial urinary sphincters surgeries performed by a single surgeon at the University of Utah Hospital were reviewed and compared with an equal number of cases, immediately before, and immediately after the initiation of the protocol. The primary outcome was compliance with SCIP guidelines for AMP.
Results: 60 cases were reviewed for each cohort. Prior to the protocol we were compliant with SCIP in only 28.3% of cases. Immediately following implementation, compliance increased to 93.2% and was 93.3% in our most recent series of 60 cases. 20% of antibiotics were administered in the OR before the protocol change compared with 81.4% afterward. 96% of the time when non-compliant, antibiotics were given too early, and in the preoperative area. The relative risk for correct antibiotic administration was 10.57 (95% CI 4.05–27.6) when administered in the OR compared with the preoperative area.
Conclusion: Implementation of a simple protocol in conjunction with proper education of the entire surgical team is able to achieve a durable and dramatic increase in compliance with recommended guidelines for the administration of AMP.

070

POSITIVE CULTURE GROWTHS FROM INFECTION-RETARDANT COATED PENILE PROSTHESES AT THE TIME OF REVISION / SAVLAGE SURGERY: A MULTICENTER STUDY
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Introduction: The majority of penile prostheses have culture positive bacteria at the time of revision surgery (J Urol 172: 153). Patients and Methods: At 4 institutions, more than 300 patients with a penile prosthesis underwent revision surgery between

November 2000 and December 2012. Only those patients who already had infection retardant-coated penile prostheses placed and grew out positive culture isolates were included in the study. Two groups: clinically uninfected revision / replacement (group 1 =71) and overtly infected undergoing salvage rescue or removal (group 2 =13). Sensitivities to the combination of tetracycline and rifampin were evaluated.

Results: A total of 48 isolates were cultured out these patients from group 1 and 18 from group 2. Culture positive isolates from the clinically uninfected revisions (group 1) were 26 *S. Epi* (all sens), 5 *S. Lugdenesis* (all sens), 3 *S. Haemolyticus* (all sens), 2 *S. aureus* (Pan – sens), 2 *S. capitis* – ureolyticus (sens), 2 *enterococcus faecalis* (1 sens, 1 intermediate sens), *K pneumonia* (sens), *Streptococcus Mitis* (sens), 3 aerobic diphtheroids, *Candida Albicans*, – rod, and budding yeast. Culture positive isolates from overtly infected patients (group 2) were 4 *S. Epi* (all sens), 2 MRSA (sens), 2 *Enterococcus Faecalis* (sens), *S. Haemolyticus*, *S. Warneri*, *Candida Albicans*, *E. Coli* (tetracycline R), *Citrobacter Freudii* (R to rifampin), *K Pneumonia* (sens), *Micrococcus species* (sens), *Peptostreptococcus species* (sens), + rods, and *Streptococcus Agalactiae* (sens)

Conclusions: Culture isolates grown from patients undergoing revision surgery for clinically uninfected (group 1) reasons appear to have a more traditional bacteria profile; meanwhile, those patients with overt infections (group 2) may have a non-traditional bacterial profile.

071

ASSOCIATION OF A PRE-SURGICAL CHECKLIST WITH REDUCTION IN PENILE PROSTHESIS INFECTIONS

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Introduction: Infection of penile prostheses (PP) is a feared complication that necessitates device removal. Following a cluster of infections by multiple surgeons at our institution, we implemented mandatory guidelines for all PP cases based on best infection prophylaxis practices. This study was performed to define the impact of a rigorously applied pre-operative checklist on PP infection risk.

Materials and Methods: Patients that underwent PP surgery comprised the study population. Patients were divided into groups based on the time period of surgery: 1 - pre-outbreak, 2 - outbreak, 3 - post-intervention. Unlike cases in Groups 1 and 2, all cases in Group 3 complied with a standardized checklist mandating: Hemoglobin A1c level <9 and negative urine culture within 30 days prior to surgery, timed chlorhexadine hand scrub for OR personnel and genital scrub for patient, Chloraprep skin preparation, intravenous Ancef/Gentamicin administration within 1 hour prior to incision, and Rifampin/Gentamicin intraoperative irrigation solution.

Results: The analysis included 144 men (mean age 64.8 years). Groups 1, 2, and 3 had infection rates of 2/88 (2%), 6/8 (75%), and 0/48 (0%), respectively. Poisson regression analysis was performed to test for the difference in risk for infection across time periods. The incidence risk ratio for the outbreak period was 19.28 times that of the pre-outbreak period and fell to 0 in the post-intervention period.

Conclusion: Multiple surgeons previously practiced divergent infection prophylaxis strategies for PP surgery at our institution. Following an outbreak of infected PP cases, implementation of a strictly-observed checklist of institutionally-determined best practices for PP infection prophylaxis leads to a significantly decreased infection rate.

072

IMPROVED INFECTION OUTCOMES AFTER MULCAHY SALVAGE PROCEDURE AND REPLACEMENT OF INFECTED IPP WITH MALLEABLE PROSTHESIS

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Introduction: Since its introduction in 1996, Mulcahy salvage has significantly improved outcomes for removal and replacement of infected IPPs. Long-term follow-up data of Mulcahy salvage shows an infection-free rate of 82%. Since 2006, 21 patients have undergone Mulcahy salvage with IPP removal and replacement with malleable prosthesis at our institutions. Of these patients, 20 (95.2%) have remained infection free postoperatively. Additionally, 4 of these 20 patients have undergone subsequent malleable replacement with IPP.

Patients: This is a retrospective multi-institution study of 21 patients who underwent Mulcahy salvage with IPP removal and replacement with malleable prosthesis. Patients' operative notes and charts were extensively reviewed to compile study data.

Methods, Results: Between 2006 and 2013, 21 patients underwent infected IPP removal and replacement with malleable prosthesis via Mulcahy salvage. Average age was 55, range 41 to 71. Average operative time was 157 minutes, range 110 to 209. Postoperative follow-up ranged from 2 weeks to 84 months. Sixteen of 20 patients retained malleable prosthesis, 4 patients subsequently underwent replacement with IPP. This occurred on average 9 months after Mulcahy salvage, range from 1 to 29 months. One patient had persistent infection after Mulcahy salvage with malleable and underwent explant 10 days later.

Conclusion: Mulcahy salvage procedure and replacement of IPP with malleable prosthesis has an improved infection-free rate of 95.2% when compared to the 82% infection-free rate after IPP removal and replacement. Additionally, 4 of the 20 patients who remained infection free were able to successfully undergo subsequent removal of malleable prosthesis and replacement with IPP an average of 9 months later.

073

EFFECT OF OPERATIVE LOCAL ANESTHESIA ON POSTOPERATIVE PAIN OUTCOMES OF INFLATABLE PENILE PROSTHESIS : PROSPECTIVE COMPARISON OF TWO MEDICATIONS

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Purpose: Contrast efficacy of dorsal penile nerve block (DPNB) in reducing postoperative pain following inflatable penile prosthesis (IPP) compared to patients without block and detect a difference between two injectable anesthetics.

Materials and Methods: From 1/2013 to 6/2013, 131 patients were randomized prospectively into 3 groups. All IPP were first time, performed under general/spinal anesthesia with supplemental DPNB by high volume IPP surgeon with 24 hour observation. 40 patients were in (Exparel®) DPNB group, 47 in (Naropin®) DPNB group & 44 controls had no DPNB. Postoperative pain was quantitated by Visual analog scale (VAS). Oral/IV pain medication need was measured during hospitalization and every 24 h during first 7 days.

Results: In first two hours VAS 2.13(CI 1.66–2.60) Exparel® group; 2.89(CI 2.44–3.24) Naropin® group and 6.55(CI 6.14–6.96) control group. There was significant difference between medicated patients and control group ($p < 0.0001$) but no significant difference between the two injectables. 52.5% of Exparel® group were pain free at day 2 compared with 31.9% of Naropin® group and 38.6% control group. While most patients responded to oral pain pills, 42% of series required IV Morphine for relief. Mean Morphine IV usage was 0.85 for Exparel® group; 1.87 for Naropin® group and 1.67 in control group. The Exparel® group had less pain on second day and less need of Morphine (27.5%) but neither finding was significant. Virtually all patients required oral pain medication day 2–7.

Conclusions: DPNB during IPP with both anesthetics provides effective analgesia in the immediate post operative recovery period but does not impact longer term pain relief when compared to patients without penile block.

074

INFECTION RETARDANT COATED VERSUS NON-COATED PENILE PROSTHESIS CULTURES DURING REVISION SURGERY: A MULTICENTER STUDY

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Purpose: Previously published papers have shown that the majority of clinically uninfected penile prostheses have organisms growing in the implant spaces at reoperation (J Urol 172: 153, 2004). 3–piece penile prostheses (IPP) can have infection retardant coatings; InhibiZone on the American Medical Systems 700 series and Titan hydrophilic coating on the Coloplast Titan series. Does infection retardant coated implants have lower cultures rates at the time of clinically uninfected revision surgery as compared to penile prostheses without coating?

Materials and Methods: At four institutions, cultures were prospectively obtained from penile prostheses at revision surgery for any reason. Immediately upon surgical exposure of the pump, cultures were obtained. If a bacterial biofilm was noted on any component, it was additionally cultured. 258 patients had cultures taken at the time of revision surgery for any reason, only patients undergoing clinically uninfected revision / replacement surgeries with adequate data were included for a total cohort of 194 patients: 67 with infection retardant coated implants and 127 uncoated penile prostheses.

Results: During revision surgery for non-infected IPP, culture positive bacteria was found in 93 of 127 (67%) patients with non coated IPP. Meanwhile, 40 of 67 (60%), of patients with coated IPPs showed positive cultures. Of the 93 non-coated patients, 81 (87%) had positive culture for Staphylococcus genus, while 30 (75%) of the 40 patients with coated IPP had a cultured isolate of the Staphylococcus genus.

Conclusion: Positive cultures and visible bacterial biofilm have been shown to be present on clinically uninfected IPPs at the time of revision surgery whether or not the IPP is coated with infection retardant coating.

075

LONGITUDINAL FOLLOW UP OF PATIENTS UNDERGOING SURGERY FOR PENILE PROSTHESIS EXTRUSION: MANAGEMENT TECHNIQUES AND OUTCOMES

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Introduction: Penile prosthesis surgery is a durable management strategy for erectile dysfunction that is associated with high patient and partner satisfaction. Despite several device modifications in recent years, many patients subsequently require revision procedures. Device extrusion is one reason prompting men to undergo revision surgery. There is a paucity of data describing techniques used to manage these patients and their associated outcomes.

Materials and Methods: Data was analyzed from a comprehensive, prospective database consisting of consecutive patients undergoing penile implants at our center. Surgical strategies as well as outcome data associated with these techniques were reviewed.

Results: Twenty–three patients underwent a total of 27 procedures for device extrusion. Average patient age was 67+/-11 years and 7 (30%) patients had diabetes mellitus. Overall, 11 (41%) procedures were performed for isolated distal extrusion, 3 (11%) were for proximal extrusion, and 13 (48%) procedures corrected both proximal and distal extrusion. Distal rerouting via a subcoronal incision was the most common technique used, and was performed in 21 of the 24 distal extrusions (87.5%). Rerouting and stabilizing the proximal cylinder with nonabsorbable suture placed into a rear tip extender was deployed in 12 (75%) of proximal extrusions. Three patients experienced infections; one was immediately salvaged, and the others underwent delayed re-implant. At a mean follow up of 21.3+/-23.8 months, all patients currently have a functional device in place.

Conclusions: Approximately 30% of men undergoing penile prosthesis surgery will require revision surgery at 10 years. Contemporary rerouting procedures offer safe and highly effective solutions to those patients with device extrusion.

076

PENILE CORPORAL HEALING AFTER DISTAL CORPORA-GLANULAR SHUNTS: A NOVEL RAT MODEL

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Objective: T-shunts are commonly performed for patients with ischemic priapism. Many of these patients may need penile implants for erectile dysfunction subsequently. Early insertion of a penile prosthesis can be associated with corporal perforation requiring surgical revision at the shunt site. Delayed insertion is technically more difficult due to the dense corporal fibrosis that routinely forms. The objective of our work was to develop a rat model to study distal corporal healing and evaluate the tensile strength of corporal scar tissue over time.

Methods: Corporo-glanular shunt procedures were performed on 28 anesthetized male Sprague-Dawley rats after erection had been created using a vacuum device and constrictive band. A T-shunt was created in the left distal corpora followed by intracavernosal dilation. Strength-testing of corporal tissue on the right control side and left ex-shunt side was done using a customized intracavernosal force gauge daily from Day 1 – 7. The maximal tensile strength was measured by the peak force needed to perforate the corporo-glanular junction.

Results: The model allowed reliable measurement of corporal tissue strength. The ex-shunt side showed close to 90% recovery of tissue strength starting from Day 3 with maximal tissue strength achieved on Day 7.

Conclusions: Penile corporal healing and tensile strength can be evaluated using this rat model. Complete distal corporal tissue strength recovery was achieved 7 days after injury.

077

LONG TERM OUTCOMES OF INCISION AND GRAFTING SURGERY FOR THE TREATMENT OF PEYRONIE'S DISEASE: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction and Objectives: Peyronie's disease is characterized by the presence of a fibrous plaque in the tunica albuginea of the penis leading to any combination of penile curvature, pain, and erectile dysfunction (ED). Attempts to maintain penile length by utilizing incision and grafting (I&G) techniques have been associated with varying degrees of long term success and adverse outcomes. This systematic review was conducted to assess the long-term outcomes of (I&G) for the surgical treatment of Peyronie's disease (PD).

Methods: A systematic review of PubMed® and Medline® was performed to identify all relevant articles. Studies selected for inclusion incorporated patients with stable PD of > 1 year. Post-operative reports and follow-ups visits were evaluated to determine outcomes from I&G procedures, with a minimum mean follow-up period of at least one year.

Results: Eighteen clinical case-studies were included in this analysis, with a combined 633 primary I&G procedures identified. Mean penile curvature was 57°, while ED, penile shortening, re-occurrence of curvature, diminished sensation, penile straightening and positive patient satisfaction occurred among 13.0%, 31.9%, 11.2%, 12.8%, 84.5% and 76.9% of patients, respectively ($P < 0.05$).

Conclusion: I&G represent an effective and reproducible surgical option for PD, with long-term outcomes reported. ED, penile shortening, and persistence or recurrence of curvature are not uncommon sequelae following I&G and are common reasons for patient dissatisfaction. Additional long-term studies are required to compare various graft materials as well as to provide comparisons against alternative techniques.

078

AMS 700 CONCEAL RESERVOIR SUB-MUSCULAR PLACEMENT: INITIAL RESULTS WITH 1-YEAR FOLLOW-UP FROM THE PROSPECTIVE REGISTRY OF OUTCOMES WITH PENILE PROSTHESIS FOR ERECTILE RESTORATION (PROPPER)

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Introduction: With continued interest in ectopic reservoir placement for patients undergoing 3-piece inflatable penile prosthesis (IPP) surgery, multi-center surgical implantation data from the PROPPER study were examined to establish initial clinical outcomes for patients with the Conceal™ Low Profile reservoir placed sub-muscularly.

Methods: Patient characteristics and AMS 700 surgical implantation details were reviewed for the first 50 study patients consecutively implanted with Conceal reservoirs placed sub-muscularly in an ongoing, prospective, multi-center clinical registry study. Initial outcomes from 1-year post-operative follow-up evaluations were also reviewed for this study cohort.

Results: Of the first 352 patients implanted with an AMS 700 IPP across all study sites, sub-muscular Conceal reservoir placement was used in 57 patients (16%) at 3 sites. In the initial 50-patient cohort, 48% of the men had radical prostatectomy as their primary etiology of ED. Post-operative IPP complications requiring revision were reported within 6 weeks of surgery in 3 patients: 2 reservoir herniations, and 1 device fluid loss. At 1-year follow-up, all 3 patients were satisfied and using device more than once per month. No auto-inflation, reservoir palpability, or bladder, bowel or blood vessel complications were reported through a mean of 14 months post-surgery.

Conclusions: Conceal sub-muscular reservoir placement appears to be a safe option for men receiving 3-piece IPP implants, and avoids potential injury to bladder, bowel and blood vessels.

079

FINITE ELEMENT SIMULATION MODELING TO STUDY THE BEHAVIOR OF A NOVEL SHAPE-MEMORY BASED PENILE PROSTHESIS

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Introduction: We have conceptualized and developed a novel penile prosthesis that relies on shape memory alloy (SMA) changes to alternate between a flaccid and an erect state. Though bench tests are an indispensable tools for assessing mechanical properties, they are time consuming, can be performed only on existing devices, and their conclusions are valid only for the specific geometry under analysis. Computer simulations offer an alternative and complementary way to design new devices without the need of prototyping every solution. Finite element (FE) simulations were thus used to simulate in silico the mechanical behavior of the prosthesis in different configurations to optimize the design.

Methods: 3D CAD drawings of the novel penile prostheses were created using Solidworks and exported to Abaqus software for meshing. Nitinol material's nonlinear behavior was simulated using a three-dimensional continuum-scale constitutive model developed by Stebner et al. Buckling and bending simulations were carried out on 2 different designs.

Results: Our FE simulation analysis for buckling showed that the application of 1.5 kg of axial force to the prostheses in the erect phase created minimal deviation from the axis (<3 degrees). In bending, under the application of the same 0.4kg force the prosthesis with slots in the backbone showed less deflection from the axis (15mm vs. 30 mm without slots) but higher general stresses. This bending behavior correlated well with bench tests (within 2mm). We next evaluated the stress distribution on the devices as shape memory alloys. In none of our tests did our prostheses cross the threshold or recoverability.

Conclusion: Finite element simulation is a useful tool to evaluate prosthesis designs and predict behavior of SMAs under different mechanical situations.

080

INTRA-CAVERNOSAL HEMOSTATIC MATRIX APPLICATION TO REDUCE POST-OPERATIVE BLEEDING AFTER INSERTION OF INFLATABLE PENILE PROSTHESIS

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Introduction: Currently, methods of preventing a post implant scrotal hematoma include tamponade of corporotomy by leaving cylinders inflated or via a pressure dressing like a “mummy wrap.”Alternatively use of a closed-suction drain can also be used to prevent hematoma formation. All of these methods require post-operative care and or intervention to remove the drain. A novel technique to facilitate reliable and safe cylinder placement with minimal postoperative bleeding and scrotal swelling is described along with patient outcomes.

Methods: 217 patients underwent placement of an inflatable penile prosthesis (IPP) through a peno-scrotal approach utilizing the prior described “no touch”technique. During each corporotomy

closure, 5cc of Surgiflo® hemostatic matrix was injected into each corporotomy just prior to tying down the last knot of our running stitch. This allowed for optimal placement of the agent. With hemostasis achieved, we completed the procedure without placement of a drain or wrap and maintained the cylinders deflated. Results: From 2012 to 2013 there were no intraoperative complications with regards to the cylinders, pump, tubing, or reservoir. Follow-up for each patient was at 6 weeks, 3 months, 6 months and out to one year. Of the 217 implants, there have been zero infections and no postoperative scrotal hematoma formation at the above follow-up office visits.

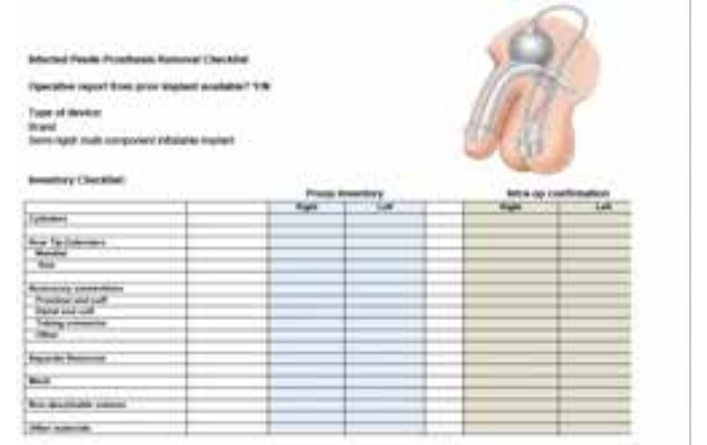
Conclusions: The application of a hemostatic matrix into each corporotomy during corporotomy closure is a safe and useful alternative to traditional drains or wraps. Performing even difficult removal and replacement IPPs is possible with this technique, and the reduction in hematoma formation will reduce the opportunity for implant infections.

081

IMPLEMENTATION OF A TWO-STEP SURGICAL CHECKLIST WHEN REMOVING PENILE IMPLANTS

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Introduction: When a penile prosthesis becomes infected, all device components and associated foreign materials must be removed. Lack of familiarity with the prior surgery, technical challenges associated with removal, and surgical error may lead to retained infected hardware that may necessitate future surgery.



Materials and Methods: Data was analyzed for six patients who were treated for retained, infected hardware at our center. A two-step surgical checklist was developed (figure 1). The first step is implemented prior to surgery, and involves creation of an inventory of materials that will need to be removed. The prior operative report or communications with the original surgeon is helpful in accomplishing this step. The second step occurs at the time of device removal, in which a member of the OR team “calls out”and confirms that all device materials are removed.

Results: We have used the two- step implant checklist for 15 patients undergoing: salvage operations for an acutely infected implant (n=4), revision surgeries associated with a modified washout procedure (n=9), and removal of infected implants (n=2). The checklist was easy to use, added little time to the surgery, and provided help in two cases in which additional rear tip extenders would have been missed.

Conclusions: A two– step checklist is easy to use, and may provide an effective prevention strategy to avoid retained foreign materials at the time of penile prosthesis removal.

082

MODELING WITH COLOPLAST TITAN IMPLANT FIXES 70 DEGREES OF CURVATURE BY 3 MONTHS

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Introduction: Management of concomitant Peyronie's disease plus erectile dysfunction may be successfully treated with IPP surgery. Modeling is well described, but there remains a need in quantitative results, both immediately post–op and when followed. Varying levels of success are offered to patients with a range of pre–operative penile curvature.

Patients and Methods: 38 patients underwent IPP placement and modeling with a Coloplast Titan device at a single institution between 6/2010 and 6/2013. Most curvatures were dorsal (20) or ventral (15). Degree of curvature was identified by home or office photo, history, or measurement upon initial test inflation. Results recorded are final amount of curvature after modeling at the procedure conclusion, then measurement at the 3 month visit with inflation. In some cases a sterile protractor was used during surgery, in others surgeon visualization was used.

Results: Pre–operative curvature ranged from 5 to 90°. All patients with 60° of curvature or less were completely straightened. 7 patients had residual curvature after modeling, with mean reduction immediately post–op of 60°, with another mean of 10° improvement achieved in next 3 months. Of the 7, five (5) started with severe ventral curvature, with residual 5–15° bends. 2 with dorsal curves achieved 65–75° improvements but still had slight residual curves.

Conclusion: With this device and procedure, patients with less than 70° or less of curvature will ultimately be straight. With more profound initial curves, some residual curvature may remain. More extensive procedures such as grafting or plaque incision may be required but only in those with than 90° ventral curve.

083

ORAL ENCLOMID (ANDROXAL) RAISES FREE AND TOTAL SERUM TESTOSTERONE IN HYPOGONADAL MEN: COMPARISON WITH A TOPICAL GEL

Gregory Fontenot, PhD¹; Joseph Podolski, BS¹

1: Repros Therapeutics

Clomid can be used in men to raise total serum testosterone (TT); however, this increase is inconsistent. This drug is a mixture of two geometric isomers with different properties. Enclomid (the trans–isomer) has effects consistent with estrogen antagonism whereas zuclomid (the cis– isomer) often acts as an agonist. The clearance of each isomer from the blood differs with zuclomid persisting much longer. We reasoned that these factors could all contribute to the lack of consistent outcomes. When given to older male baboons, zuclomid led to lower levels of TT but. Enclomid raised serum testosterone. These experiments led to our initial randomized, double–blind, placebo– and active–controlled study in 52 hypogonadal men. Subjects had low to borderline low TT

(99–343 ng/dL, mean of 275 + 88 ng/dL) with normal LH and FSH levels. Oral enclomid in doses of 12.5 mg 25 mg and 50 mg were compared to placebo and AndroGel® 1% (5.0 G). After 14 days of treatment, there was a dose–dependent rise in TT with increasing enclomid doses: 12.5 mg was associated with a TT of 412 + 194 ng/dL; 25 mg with 520 + 160 ng/dL, and 50 mg with 589 + 172 ng/dL, values in the normal range. AndroGel® 1%, the active control, resulted in a TT of 473 + 289 ng/dL, consistent with levels reported in the literature. All four treatments increases compared to baseline. Free serum testosterone (FT) levels demonstrated a dose–dependent rise with enclomid whereas the placebo group did not increase. The change in free testosterone seen with AndroGel® 1% (5.0 G) was +8.0 + 10. ng/dL compared to +8.8 + 6.3 ng/dL with the highest dose of enclomid. We are now in Phase 3 trials. We can show that enclomid significantly and consistently increases TT and FT and represents a new oral modality for men with secondary hypogonadism.

084

ORAL ENCLOMID (ANDROXAL) RAISES SERUM TESTOSTERONE AND ESTROGEN IN HYPOGONADAL MEN AND MAY HAVE FAVORABLE EFFECTS ON BONE MINERAL DENSITY

Gregory Fontenot, PhD¹; Joseph Podolski, BS¹

1: Repros Therapeutics

Clomid is used to raise serum total testosterone (TT) and sperm counts in men previously on exogenous testosterone treatments. Enclomid (the trans– or (E)–isomer in clomid) has effects consistent with estrogen antagonism. . It appears to be SERM–like. Our randomized, double–blind, placebo– and active–controlled studies in hypogonadal men demonstrated increases in serum testosterone (TT) in conjunction with increases in LH and FSH. Estrogen (E2), DHT and free serum testosterone demonstrate dose–dependent rises with enclomid over baseline whereas placebo did not increase over baseline. We can also show increases in sperm counts in men previously on exogenous T and preservation of sperm counts when naïve men go on enclomid. We are currently conducting a 1–year safety study in hypogonadal men assessing effects on bone through DEXA scanning. Key inclusion criteria were age 60 years or less and BMI greater than 25. Remarkably 16% of men screened failed due to osteopenia. In a look at the first 40 men, enclomid raised TT and E2 as expected but also concomitantly increased bone mineral density (BMD). The placebo group lost bone. These data are consistent with those from an earlier Phase 2 trial where we measured markers of bone turn–over (P1NP–1, and C–telopeptide) in the serum of men on drug as compared to placebo or exogenous T. In that study, the effects of enclomid treatment resembled those typical of treatment of post–menopausal women with Raloxifene, a SERM. In conclusion, we believe enclomid (Androxal) increases testicular function in men with secondary hypogonadism. If our initial results bear out, Androxal represents a new oral modality for men with secondary hypogonadism who do not wish to lose BMD. These results may be due to increases in E2 and/or direct SERM–like action.

085

THE CUPPID TRIAL: CARDIOLOGY CLINIC PATIENTS ARE AT HIGH RISK FOR SYMPTOMATIC HYPOGONADISM

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Objective: We sought to assess the prevalence of symptomatic and biochemical hypogonadism in a cross sectional cardiology clinic population.

Material and Methods: We assessed a cohort of consecutive hormonally naïve men within a cardiology clinic via IIEF-15, IPSS, ADAM, previous ED treatment questionnaires, and serum total testosterone (T), estradiol (E) and sex hormone binding globulin (SHBG). Data were collected on patient age, BMI, and co-morbidities. We utilized the on-line ISSM calculator to determine Free Testosterone (CFT) values. We considered T < 300 ng/dL, CFT < 6.5 ng/dL, E > 42, SHBG > 60 and calculated T/E ratio of < 10 abnormal. We considered a man hypogonadal if he had both a CFT < 6.5 and had a yes response to ED, libido, or lack of energy or ≥ 3/10 yes responses on the ADAM screener.

Results: 102 patients, mean age of 67 years, had a mean BMI of 32. Smoking history, hyperlipidemia, and diabetes were present in 65%, 93%, and 37% respectively. Mean serum T, SHBG, and E were 334ng/dL, 42 nmol/L, and 48 pg/mL respectively. 49 patients (48%) had a T < 300ng/dl whereas 73 patients (72%) had a CFT < 6.5 ng/dl. Of men with CFT < 6.5, 97% were symptomatic and thus could be considered hypogonadal. Moderate to severe ED & LUTS prevalence was 76% and 60% respectively. T:E ratio was suboptimal in 73 patients (72%). 95% had symptoms of low T per the Adam screener. Only 28% & 32% of the total cohort reported normal libido and energy levels, respectively.

Conclusion: The overall prevalence of symptomatic hypogonadism, moderate to severe ED, and moderate to severe LUTS in our cardiology clinic was 70, 76 and 60% respectively. Total testosterone alone underestimated true biochemical hypogonadism (compared to CFT) in 24% of our cohort.

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086

FREE TESTOSTERONE BY DIRECT AND CALCULATED MEASUREMENT VERSUS EQUILIBRIUM DIALYSIS IN A CLINICAL POPULATION

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Introduction: Despite consensus that free testosterone (FT) measurement plays an important role in the evaluation of men with testosterone deficiency, the value of clinically available FT assays remains controversial.

Methods: 56 consecutive adult men (mean age 54y, range 26–77) presenting to an outpatient andrology clinic had blood samples assessed for FT. Samples were split and tested by the two methodologies at a Quest Diagnostics national reference laboratory. The patient population included men with treated and untreated testosterone deficiency (TD) and men without TD. cFT was calculated by the Vermeulen method using SHBG values and a constant value for albumin.

Results: A robust correlation approaching unity was noted for RIA and EqD ($r=0.966$) and for cFT and EqD ($r=0.986$). Strong correlations were observed for men receiving testosterone therapy and for men in the lowest and highest quartiles for total and free testosterone. The correlation of total testosterone with FT was similar for cFT ($r=0.843$), RIA ($r=0.806$) and EqD ($r=0.809$). No significant correlation with SHBG was observed for any FT methodology. Bland–Altman analysis demonstrated similar degree of bias for both cFT and RIA, although cFT consistently overestimated FT. Numerical values for RIA were approximately one–sixth of EqD values. Results from this study using a national reference RIA may not be applicable to all RIA assays.

Conclusions: These results support the clinical use of both RIA and cFT as measures of FT. Due to numerical differences, each test requires its own set of reference values.

087

BONE MINERAL DENSITY AND RESPONSE TO TREATMENT IN TESTOSTERONE DEFICIENT MEN YOUNGER THAN 50 YEARS OLD

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Introduction: Testosterone (T)–deficient men over the age of 50 are at risk for osteopenia or osteoporosis. Less is known about the impact of T–deficiency on bone mineral density (BMD) in younger men.

Methods: A retrospective chart review at an andrology/infertility clinic identified 201 men under the age of 50 who underwent a baseline DXA scan and had total T<350ng/dL or free T<1.5ng/dL. 71 men(35.3%) had a second scan after an average of 30.4±16.5 months. BMD and T–scores were determined for the lumbar spine and left hip and BMD status was based on the site of lowest BMD. **Results:** Eighty–seven men(43.2%) had BMD consistent with osteopenia(T<–1.0). This prevalence was higher than expected for a young, healthy standard reference population (OR 4.03; $p<0.001$). Four men(1.99%) had BMD consistent with osteoporosis (T<–2.5). Higher BMI is independently associated with increased BMD at both the spine ($p=0.0166$) and hip ($p<0.001$). Men with E2<32pmol/L had a 58.3% rate of osteopenia–range BMD (OR 2.76; $p=0.0023$) and there was a trend towards decreased BMD for men with lower E2 levels ($p=0.0621$). Osteopenia–range BMD resolved at follow–up for 5/35(14.3%) men, all of whom were treated with T. Mean change in t–score was 0.273 for 40 men receiving T alone($p<0.001$), –0.18 for 15 men treated with clomiphene citrate alone($p=0.001$), and –0.3 for 12 men treated with an aromatase inhibitor($p=0.0136$).

Conclusion: BMD consistent with osteopenia is common among young men with T deficiency, particularly for men with low serum E2 or low BMI. These results suggest routine DXA screening may be warranted in young men with T deficiency. As in older men, T therapy appears to improve BMD, however the use of clomiphene citrate and aromatase inhibitors to increase serum T may be associated with negative impact on BMD.

088

INCREASED BODY FAT IS ASSOCIATED WITH HIGHER LH LEVELS IN TESTOSTERONE-DEFICIENT MEN

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Introduction: Recent data suggest that weight loss can improve testosterone (T) levels in men. Since adipokines are known to influence the hypothalamic–pituitary–adrenal axis, it has been hypothesized that fat may impact serum T levels by a suppressive effect on gonadotropins. In this study we examine the influence of body composition on luteinizing hormone (LH) levels among T–deficient men.

Methods: A retrospective medical record review identified 64 men (mean age 58.6 ± 10.8 y) with T deficiency who presented to an outpatient andrology/infertility clinic, and underwent a whole body DXA scan. T deficiency was defined as total T <350ng/dL and/or free T <1.5ng/dL (RIA). Total and central (trunk plus head) fat% were determined from the DXA scan. Age, comorbidities, and blood test results prior to treatment were obtained by chart review. **Results:** Mean LH was 3.96 ± 2.34 (range 1.2–14.3 IU/L) and only 8 men (12.5%) men had LH <2.0. Without adjustment for covariates, LH was positively associated with SHBG ($r=0.292$; $p=0.0251$) and there were non–significant trends towards positive associations between LH and total body fat% ($r=0.247$; $p=0.0572$) and central fat% ($r=0.265$; $p=0.082$). After adjusting for comorbidities such as diabetic status, and results for T, FT, and E2 in a multivariate regression model, statistically significant associations with LH were demonstrated for total body fat% ($p=0.009$) and central fat% ($p=0.0375$). For the 8 men with LH <2.0, fat% was $26.1 \pm 5.05\%$ compared to $28.7 \pm 5.05\%$ for other 56 men ($p=0.272$).

Conclusion: LH levels are positively, not negatively, associated with body fat percentage in T–deficient men. These results suggest that obesity does not suppress serum T via central inhibition of gonadotropins. Instead, obesity may have a direct effect on testis function.

089

THE CORRELATION BETWEEN BODY MASS INDEX AND EFFECTIVE TESTOSTERONE REPLACEMENT

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Introduction: Testopel®, implantable 75mg testosterone pellets, has recently become a popular approach to replace testosterone in hypogonadal men. However, limited studies have been done to characterize testosterone levels after pellet implantation.

Methods: A retrospective review of male patients undergoing Testopel® placement at a single center from 2009 to present was performed. Seventy–two hypogonadal patients underwent Testopel® implantation using 10–12 pellets. Men were divided into two groups: BMI <30 and BMI >30. Total T was measured at 1 month, 3 months, and 5 months. Student's T–test was used for statistical analysis.

Results: Patients with a BMI <30 receiving 10–12 pellets had an avg. T of 719.95 ng/dl at 1 month. While patients with a BMI >30 receiving 10–12 pellets had an avg. T of 602.8 ng/dl at 1 month ($p<0.05$). The avg. T at 1 month for 10 pellets with a BMI <30 was

677.9 ng/dl and 576.75ng/dl for those with a BMI >30 ($p<0.05$). Patients receiving 12 pellets had an avg. T at 1 month of 762 ng/dl with a BMI <30 and 628.9 ng/dl for men with a BMI >30 ($p<0.2$). The avg. T at 3 months for patients receiving 10 pellets with a BMI <30 was 410 ng/dl vs. 292 ng/dl for patients with a BMI >30 ($p<0.01$). The avg. T at 3 months for patients with BMI <30 receiving 12 pellets was 440 ng/dl and 331 ng/dl for patients with a BMI >30 ($p<0.8$).

Conclusion: While this study is limited by a small sample size, men with a BMI >30 appear to have less of an increase in T per pellet than men with a BMI <30. Men with lower baseline T and BMI >30 may benefit from more pellets. Additionally, patients with a BMI <30 appear to be eugonadal at 3 months compared to those with a BMI >30. BMI may have an effect on the initial response and duration of eugonadal state after Testopel® implantation.

090

DOES HYPOGONADISM CONTRIBUTE TO RECURRENT URETHRAL STRICTURE DISEASE?

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Introduction: Despite the wide use of testosterone in conjunction with hypospadias surgery little is known about its effects on genital tissue healing and neovascularization. Angiogenesis plays a key role in wound repair and tissue response to ischemia. Testosterone administration increased vascularity and decreased early fibrosis in a human foreskin model and DHT has been found to promote male endothelial cell migration, proliferation, and tubulogenesis in–vitro. The effect of hypogonadism on urethral stricture disease is unknown. To our knowledge there are no reports on the prevalence of hypogonadism in patients presenting with urethral strictures.

Methods: IRB approval was obtained and we reviewed the records of all consecutive patients who underwent treatment for stricture disease from 2010 to 2013. Demographic information was collected along with total testosterone (TT) levels prior to surgery. The prevalence of hypogonadism was then determined.

Results: A screening TT was performed in 90% of cases. Only 8% of our urethral stricture patients were above 350 ng/dL. 34% had TT levels <150, 23% 150–250, and 35% 250–350. 59% of patients had at least one major risk factor for vascular disease. 79 % of patients were overweight and 31% were morbidly obese. 66% of patients had at least one prior DVIU or urethroplasty. The overall success rate at 6 months was 82%.

Conclusion: There is a significant rate of hypogonadism in patients with recurrent urethral stricture disease. These patients should be screened for signs and symptoms of low testosterone and counseled regarding the risks and benefits of replacement prior to reconstructive surgery.

091

TIMING OF IMPROVEMENT IN LUTS WITH TESTOSTERONE SUPPLEMENTATION WITHIN THE FIRST SIX MONTHS OF THERAPY

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Introduction: There has been caution in using testosterone replacement therapy (TRT) in men with moderate to severe lower urinary tract symptoms (LUTS) for fear of worsening their symptoms. We have previously shown a modest improvement in LUTS with TRT. The primary objective of this study was to examine the timing of improvement in LUTS with TRT in men with hypogonadism (low T) over the first 6 months of therapy initiation.

Methods: Our retrospective database identified men with low T who received TRT from 2002 to 2012 and had pre & post AUASI measures within the first 6 months of treatment initiation.

Results: We identified 118 men who underwent TRT and were assessed within the first 6 months, the majority of whom had topical therapy (58%) or a combination of topical and pellet based therapy (21%). The mean baseline AUASI was 10.8 (+/-7.8) and our mean duration of TRT was 692 days (+/-77). Overall, the mean change in AUASI was -1.1 (+/-6.1). 45% (53/118) of patients had <3-point change in AUASI in either direction. 32% improved AUASI ≥3 points while 23% had worsened their AUASI ≥3 points. Post-treatment AUASI was obtained at 1 month in 26 men, 3 months in 40 men and at 6 months in 52 men. 23 men with moderate/severe LUTS at baseline AUASI 18.7 (+/-5.2) were evaluated within 2 months and showed improvement of the AUASI to 14.1 (+/-7.3). **Conclusions:** We demonstrate that initiating TRT in men with low T has a low risk of worsening LUTS. In fact, many men had an improvement in symptoms. The men with moderate/severe LUTS at baseline had a decrease in AUASI as early as within 2 months, a time frame consistent with other LUTS medications. Future research should focus on larger patient population studies to further examine this relationship and its role as an intervention for LUTS in hypogonadal men.

092

VASECTOMY REVERSAL OUTCOMES IN MEN PREVIOUSLY ON TESTOSTERONE REPLACEMENT THERAPY

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Introduction: Testosterone replacement therapy (TRT) is increasingly common in younger men. Prior TRT may adversely affect the outcome of vasectomy reversal (VR) by suppressing spermatogenesis, altering intraoperative findings used to determine the method of reconstruction. Preoperative considerations and VR outcomes after TRT have never been reported.

Materials and Methods: A retrospective chart review of men who underwent TRT prior to VR from 2010–2013 was performed.

Duration of TRT, baseline and follow-up hormone levels, preoperative testicular salvage therapy and testicular sperm aspiration (TESA), intraoperative findings, semen analyses, and pregnancies were analyzed.

Results: Ten (2.7%) of 265 men who underwent VR had prior TRT. Median age was 45 (interquartile range [IQR] 38–53) after a median obstructive interval of 10 years (IQR 7–16). Median duration of TRT was 14 months (IQR 7.5–19). At baseline, suppression of luteinizing hormone (2 mIU/mL, IQR 1–3), follicle stimulating hormone (3.5 mIU/mL, IQR 2–6), and total testosterone (270 ng/dL, IQR 207–403) was observed. Patients underwent testicular salvage with clomiphene citrate and/or human chorionic gonadotropin for a median of 3 months, increasing testosterone (404 ng/dL, IQR 330–604). Two men with uncertain testicular recovery underwent preoperative TESA confirming active spermatogenesis. Twelve vasovasostomies (VV) and 7 epididymovasostomies (EV) were performed. Patency was 71% after a median follow-up of 3.3 months; 100% in men undergoing at least one VV and 50% after EV only. Pregnancy was achieved by 29%.

Conclusion: Testicular salvage therapy with TESA to confirm spermatogenesis may play a role in the preoperative management of VR in men with prior TRT. VR after TRT can have outcomes comparable to those in the general population.

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LOW TOTAL TESTOSTERONE (TT) IS ASSOCIATED WITH HIGHER MORTALITY IN MEN WITH STAGES 3-5 CHRONIC KIDNEY DISEASE (CKD)

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Objective: To evaluate the association of low TT with mortality in men with non-dialysis dependent CKD (stages 3–4).

Materials and Methods: We queried our validated CKD registry for men with stages 3–4 CKD who had TT measured. We used a logistic regression (LR) analysis to evaluate association of age, ethnicity, estimated glomerular filtration rate (eGFR), body mass index (BMI), smoking and comorbidities with low TT. We used cox proportional hazards models to evaluate association of low TT with survival while adjusting for age, eGFR, race and comorbidities.

Results: Of 26,400 men from 2005–2011, TT was measured in 3111 (11.8%). 478 did not fit our inclusion criteria. Low TT was defined as <350 ng/dl, and was found in 1410/2633 (54%). Mean age was 67.2 years (SD=11.3), mean eGFR was 50.6 mL/min/1.73 m², and mean BMI was 29.4. In a multivariable LR analysis, African American ethnicity and higher eGFR were associated with significantly lower odds of having low TT. Having diabetes and higher BMI were associated with significantly higher odds of having low TT. 373/2633 patients died during a median follow up of 2.2 years. In a multivariable Cox model adjusted for age, eGFR, BMI and comorbidities, low TT was associated with higher hazard of mortality, HR 1.24 (95% CI: 1.00–1.53). The two lowest quintiles of TT (100–225 NG/DL and 226–301 NG/DL) were associated with higher mortality (HR 1.70, 95% CI: 1.21–2.39 and HR 1.56, 95% CI: 1.12–2.19, respectively).

Conclusions: Low TT is associated with significantly higher mortality in men with stages 3–4 CKD. It is unknown whether testosterone replacement therapy in this population can improve survival.

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CAN TREATMENT OF NOCTURIA INCREASE TESTOSTERONE LEVEL IN MEN WITH LATE ONSET HYPOGONADISM?

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Introduction: To assess the effect of desmopressin on serum testosterone level in men with nocturia and late onset hypogonadism. **Materials and Methods:** We prospectively enrolled men with nocturia as well as symptoms of late onset hypogonadism. Desmopressin (0.1 mg) was administered once daily to patients for 12 weeks, and we then compared serum testosterone levels, electrolytes, frequency volume chart (FVC) indices, and changes in the International Prostate Symptom Score (IPSS), International Index of Erectile Function (IIEF) and Aging Male's Symptom (AMS) scales before and after treatment. **Results:** Sixty-two men (mean age, 68.4 years) completed pre- and post-treatment questionnaires and underwent laboratory testing. At the end of the study, the testosterone levels in men with low testosterone levels (<3.5 ng/mL) increased following the 12-week desmopressin treatment (2.85 ± 0.58 ng/mL to 3.97 ± 1.44 ng/mL; $P = 0.001$). Mean scores had decreased from 17.7 to 13.9 (IPSS), 3.8 to 3.2 (IPSS-Quality of Life score), and 33.7 to 31.1 (AMS). On the FVC, nocturnal urine volume, nocturnal polyuria index, actual number of nocturia events, nocturia index, and nocturnal bladder capacity index were significantly decreased. **Conclusion:** Desmopressin improved nocturia and other urinary symptoms. Moreover, serum testosterone levels increased significantly in men with low testosterone levels following 12-week desmopressin treatment.

Table 1. Comparison of pre- and post-desmopressin treatment values among patients with total testosterone levels <3.5 ng/mL.

Lab	Pre-treatment	Post-treatment	P-value
TT (ng/mL)	2.85 ± 0.58	3.97 ± 1.44	0.001 *
FT (ng/dL)	3.84 ± 0.81	4.56 ± 1.71	0.005 *
Questionnaire			
IPSS score	19.3 ± 7.9	15.1 ± 7.1	0.016 *
IPSS - SSS	8.0 ± 3.0	6.4 ± 2.5	0.018 *
IPSS - VSS	11.3 ± 5.8	8.8 ± 5.3	0.039 *
IPSS - QOL	3.9 ± 1.2	3.2 ± 0.9	0.019 *
IIEF score	29.5 ± 18.9	20.2 ± 18.4	0.072
IIEF-5 score	9.8 ± 7.2	6.7 ± 7.2	0.131
AMS score	31.6 ± 10.8	30.6 ± 8.8	0.671
Frequency Volume Chart			
Total volume (mL)	1710.7 ± 460.1	1748.4 ± 459.0	0.788
NUV (mL)	711.5 ± 269.2	426.9 ± 89.6	0.003 *
NPI	43.2 ± 14.5	26.5 ± 11.7	0.002 *
ANV	3.4 ± 1.1	2.3 ± 0.5	0.005 *
NI	2.5 ± 0.9	1.6 ± 0.5	0.006 *
NBCi	1.8 ± 0.3	1.6 ± 0.3	0.152

IPSS, international prostate symptom score; SSS, storage symptom subscore; VSS, voiding symptom subscore; QOL, quality of life; IIEF, International Index of Erectile Function; AMS, Aging Males' Symptoms (scale); NUV, nocturnal urine volume; NPI, nocturnal polyuria index; ANV, a actual number of nightly voids; NI, nocturia index; NBCi, nocturnal bladder capacity index.

095

ADDING THE AROMATASE INHIBITOR ANASTROZOLE (AZ) TO TESTOSTERONE PELLET (TP) THERAPY PROLONGS THERAPEUTIC TESTOSTERONE (T) LEVELS AND TIME BETWEEN TP INSERTIONS: AN OBSERVATIONAL RETROSPECTIVE STUDY

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Introduction: T replacement with TP is increasingly popular. TP insertion has a small risk of bleeding, infection, pain, and extrusion. AZ has been used off-label in men for the treatment of hypogonadism (HG) and has been shown to be safe and effective. AZ increases T levels by decreasing negative feedback of estradiol (E2) on the pituitary. Exogenous T therapy increases E2 levels. We hypothesized that the use of AZ at the time of TP insertion would sustain T levels and increase the interval between insertions. **Methods:** Records of men who underwent TP or TP and AZ (TPAZ) treatment for HG from 2011–2012 were reviewed. Men were offered AZ in addition to TP to decrease the morbidity of multiple TP insertions. Hormone panels were obtained prior to T replacement and then at 6 weeks and 4 months from TP insertion. Men were re-implanted when their T dropped below 350 and they were symptomatic. Demographics, TT, FT, and E2 levels were recorded. Data were analyzed with ANOVA and a Tukey's test. **Results:** Data from 65 insertions in 38 men were analyzed. Baseline age and hormone levels were comparable between groups. Figure 1 compares the TT Free T, SHBG, and E2 levels between the 2 groups. The TPAZ group had significantly higher TT and FT levels, lower E2 levels, and longer time between insertions (193 ± 63 vs. 124 ± 22 days) than the TP group ($p < 0.05$). **Conclusion:** The addition of AZ to TP insertion prolonged therapeutic T levels and increased the interval between TP insertions.

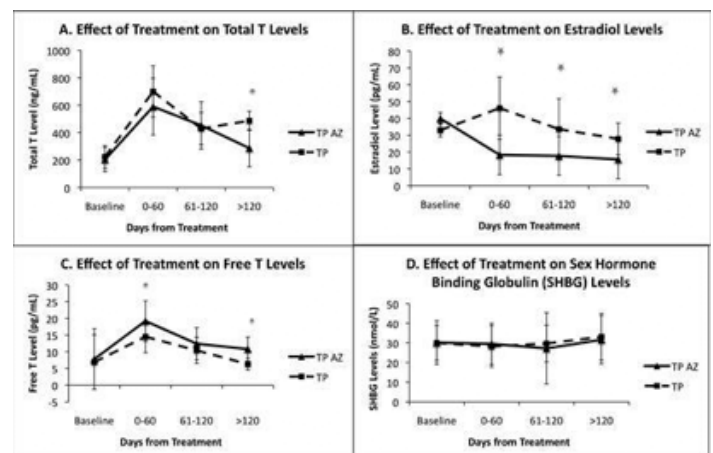


Figure 1. Total T, and free T were significantly higher for TP AZ compared to TP alone at >120 days (* $p < 0.01$) (A,C). There was no difference in SHBG levels (D.). E2 levels were higher in the TP group (B.) ($p < 0.05$). Error bars are standard deviations.

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ASSOCIATION BETWEEN DEPRESSION AND HYPOGONADISM IN MIDDLE-AGED MEN

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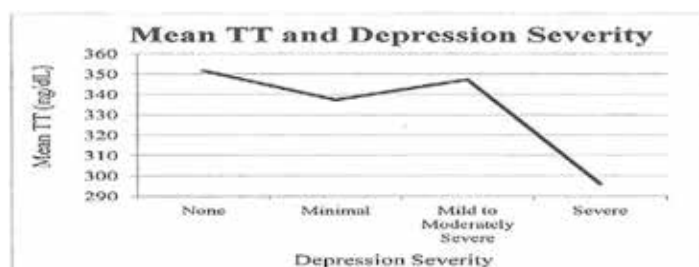
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Introduction: Data from the National Health and Examination Survey (NHANES) confirms that the highest rates of depression occur in males aged 40 – 59 years. During middle-age incidence of hypogonadism (hypoG) increases along with other health issues. It is important to identify which health issues correlate with depression. We aim to evaluate the relationship between depression and low testosterone in a large population of healthy middle-aged men.

Methods: We evaluated 2,004 male participants of the Law Enforcement Cardiac Screening Program. HypoG was defined as a total testosterone (TT) level < 300 ng/dL and depression was defined as a score <10 on the Patient Health Questionnaire-9 (PHQ-9). Chi square and ANOVA analyses were done to determine if there was any significant relationship between hypoG and depression.

Results: The mean age was 46.9±5.5 years, mean body mass index was 30.3±4.5, and mean TT was 344.9±120.6. In this population 37.7% (756) had hypoG and 6.4% (129) screened positive for depression on the PHQ-9. There was a significant difference between TT levels according to severity of depression (p=0.001). Those with severe depression had significantly lower TT compared to those with no depression (p=0.042).

Conclusion: We observed a significant association between depression and TT level. Since the PHQ-9 is a quick and easily administered questionnaire it would be prudent for clinicians to screen patients for worsening depression as an indicator of hypogonadism.



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RETROSPECTIVE STUDY OF THE EFFECT OF ANDROGEL TREATMENT IN HYPOGONADISM ON CONCOMITANT MEDICATION DISCONTINUATION

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Introduction: To evaluate effect of AndroGel on concomitant medication discontinuation in patients with hypogonadism.

Patients and Methods: A retrospective cohort study was conducted using Quintiles EMR Database (2000-2011). Subjects were males, ≥18 years with an ICD-9 code indicative of hypogonadism, or testosterone <300 ng/dL, or both. Patients were new users of AndroGel (treated) initiated within 90 days of diagnosis/testosterone measurement (index date=date of 1st AndroGel prescription). New users were patients with no use of AndroGel in index year. Treated patients were matched at a 2:1 ratio with untreated patients by age (18-44, 45-59, 60-74, 75+) and index year. Discontinuation (non-use of a medication at 6 months post-index) of 5 medication classes was evaluated (antihyperlipidemics, antihypertensives, antidepressants, antidiabetics, antiasthmatics) using logistic regression.

Results: A total of 19,934 patients were identified (treated=6,649; untreated=13,285). For 4/5 medication classes studied, AndroGel treated patients had significantly increased odds ratios for discontinuation: antihyperlipidemics (OR=1.15, 95%CI: 1.02-1.30), antihypertensives (OR=1.22, 95%CI: 1.07-1.39), antidepressants (OR=1.19, 95%CI: 1.03-1.38), and antidiabetics (OR=1.35, 95%CI: 1.09-1.68). The antiasthmatic class was not significantly different (OR=1.16, 95%CI: 0.95-1.43).

Conclusion: Treatment of hypogonadism with AndroGel was associated with greater discontinuation of concomitant medications in 4/5 medication classes studied, namely antihyperlipidemics, antihypertensives, antidiabetics and antidepressants. These findings warrant further study to determine potential benefits of initiation of AndroGel treatment on direct and indirect healthcare costs in patients with hypogonadism.

AbbVie Disclosure: This study was supported by AbbVie, Inc. AbbVie participated in study design, research, data collection, analysis and interpretation of data, writing, reviewing, and approving the publication. Amit Bodhani, Mahesh Fuldeore, and Steve Hass are AbbVie employees and own AbbVie stock. Lee Kallenbach and Joseph Vasey are Quintiles employees and have no disclosures to make.

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SALVAGE PHARMACOTHERAPY FOR ORGASMIC DYSFUNCTION AFTER TREATMENT FOR TESTOSTERONE DEFICIENCY

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Background: Some men treated for testosterone (T) deficiency have persistent difficulty reaching orgasm despite normalization of T levels. There are limited reports on the success of salvage pharmacotherapy for these men.

Methods: A retrospective chart review identified 28 T-deficient men treated with oxytocin or cabergoline for persistent difficulty reaching orgasm despite T therapy for T deficiency. All men were

euthyroid and had normal T levels with treatment. Patients were advised to take sublingual oxytocin 10-15 minutes prior to sexual activity at a starting dose of 24 or 48 IU, with the option of dose increase for lack of efficacy. Cabergoline was selectively offered at a dose of 0.5mg twice weekly as initial treatment for men with high or high normal prolactin and as a secondary option for men who failed to improve with oxytocin. Improvement in orgasmic function and side effects from therapy were determined from the medical record.

Results: Of 24 men initially treated with oxytocin, 11(45.8%) men reported improved success reaching orgasm including 4 of 8(50%) men with complete inability to reach orgasm through any means pre-treatment. Of 4 men initially treated with cabergoline (mean 19.2 ng/mL), 1 man (25%) reported improvement. Three of 5 (60%) men who initially failed oxytocin therapy were subsequently successfully treated with cabergoline (mean prolactin 8.1 ng/mL). Two men who failed to improve with cabergoline were later treated with oxytocin, both without success. No side effects were reported for either oxytocin or cabergoline.

Conclusion: Cabergoline and oxytocin appear to be safe, moderately effective therapies for men with persistent difficulty reaching orgasm despite treatment of T deficiency. Men who fail treatment with oxytocin may have success with cabergoline.

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THE IMPACT ON HYPOGONADAL SYMPTOMS OF SWITCHING FROM CLOMIPHENE CITRATE (CC) TO TRANSDERMAL TESTOSTERONE (TDT)

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Introduction: The androgen deficiency in the aging male (ADAM) questionnaire is a validated tool for the assessment of HG. We evaluate the impact of switching CC non-responders to TDT.

Methods: All men on CC were administered the ADAM pre-treatment and at least 3 months after commencement. Men who achieved poor symptomatic response (conversion from 'yes' to 'no' responses on ≤ 2 questions on the ADAM questionnaire), despite good serum T response (>400 ng/dl and >200 point change on CC) represented the study group. Men were treated with TDT, had laboratory assessment 2 weeks after commencing TDT and every 6 months after stabilization of TT levels. The ADAM was re-administered ≥ 3 months after achieving serum response to TDT. Multivariable analysis was conducted to define predictors of improved symptomatic response to TDT in the CC non-responders. Parameters factored into the model included: patient age, baseline TT, FT, LH, change in LH on CC, TT levels on CC and TDT.

Results: 56 men had mean age of 56 ± 22 years. TT levels (ng/dl) at baseline, on CC and on TDT were: 242 ± 161 , 526 ± 164 , 612 ± 216 . LH levels (IU/ml) were: 5.1 ± 5.0 , 8.6 ± 4.1 , 1.4 ± 2.4 . 32% had symptomatic improvement on TDT. Changes in symptom response (number of ADAM questions with conversion) are presented in the table. No predictors of symptomatic change in response to TDT were identified.

Conclusions: One third of patients achieving good serum but poor symptomatic response with CC have improved symptom response to TDT.

# ADAM questions with conversion	On CC	On TDT
1	25	16
2	31	22
3	0	13
4	0	10
5	0	3
>5	0	2

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SAFETY OF TESTOSTERONE THERAPY IN MEN WITH PROSTATE CANCER

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Introduction: Testosterone therapy (TTh) in men with prostate cancer (PCa) remains controversial, and published clinical experience is limited. We report our experience with TTh in various categories of men with PCa.

Methods: A retrospective chart review identified 135 men (mean age 64 ± 9) with PCa who started TTh between May 2004 and January 2013 and were followed for at least 6 months. Of these, 33 (24.4%) were on active surveillance (AS), 93 (68.9%) has undergone definitive local treatment for PCa and were without biochemical recurrence at the start of TTh, and 9 (6.7%) were treated with TTh after known biochemical recurrence.

Results: Of 33 men on AS, 3 men (9.1%) had upgrading on subsequent biopsy and 29 (87.9%) remained on AS over a mean follow-up of 31.2 mo. For 53 (39.3%) men starting TTh after radical prostatectomy, no patients had biochemical disease recurrence (PSA > 0.2 ng/dL) over 30 mo of follow-up. Forty (29.6%) patients underwent either brachytherapy or XRT and were followed for an average of 26.7mo. Of these, 2(5%) patients developed PSA 2 ng/dL over nadir but had subsequent PSAs below this threshold. Two (5%) men treated with radiotherapy elected for adjuvant HIFU. For the 9 (6.7%) patients with biochemically recurrent disease prior to starting T therapy, PSA continued to rise in 6 men without symptomatic metastatic disease over 28.7 months of follow-up. There were no skeletal-related events, and no deaths from prostate cancer in any group. Overall, 121 (89.6%) men with PCa remained on TTh with most men discontinuing therapy for lack of efficacy or other non-oncologic reasons.

Conclusion: TTh does not appear to cause higher than expected rates of PCa progression. A large majority of men with PCa treated with TTh will elect to continue treatment indefinitely.

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EFFICACY OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM FOR TREATMENT OF PEYRONIE'S DISEASE BY BASELINE PENILE CURVATURE SEVERITY: TWO LARGE DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

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Introduction: The Investigation for Maximal Peyronie's Reduction Efficacy and Safety Studies (IMPRESS) I and II examined the clinical efficacy of collagenase clostridium histolyticum (CCH) in subjects with Peyronie's disease (PD). These large identical phase 3 randomized, double-blind, placebo-controlled studies examined percent change from baseline in penile curvature deformity (PCD) and PD symptom bother score from the PD questionnaire (PDQ) as co-primary endpoints. We examine whether CCH treatment outcomes from baseline to 52 weeks differed by baseline PCD

severity stratum, 30°–60° versus 61°–90°.

Materials and Methods: The identical IMPRESS I (N=303) and II (N=309) phase 3 studies examined CCH treatment through a maximum of 4 treatment cycles, each separated by about 6 weeks. Subjects received up to 8 injections of 0.58 mg CCH, 2 injections per cycle separated by approximately 24–72 hours (plaque modeling conducted 24–72 hours after second injection).

Results: In both studies, CCH-treated subjects with baseline PCD 30°–60° and 61°–90° showed improvement from baseline in percent change PCD (IMPRESS I: –39.1 and –30.9; IMPRESS II: –28.1 and –38.3) and PD symptom bother score (IMPRESS I: –3.6 and –1.9; IMPRESS II: –2.2 and –3.0).

Conclusions: Men with PCD 30°–60° responded as well to CCH treatment as did men with PCD 61°–90°. The IMPRESS I and II studies support the clinical efficacy of CCH treatment compared with placebo for both the physical and psychological aspects of PD regardless of the baseline severity of PCD.

Supported by: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA.

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THE EFFECT OF ADJUNCT PENILE TRACTION THERAPY ON CURVATURE, LENGTH, AND CIRCUMFERENCE IN PATIENTS UNDERGOING INTRALESIONAL INJECTION WITH INTERFERON ALPHA-2B FOR PEYRONIE'S DISEASE

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Introduction: Penile traction therapy (PTT) is a non-invasive treatment modality for Peyronie's disease (PD) where a gentle tension is held on the penis. PTT has been described as both a monotherapy and as an adjunct to other therapies. Intralesional injection (ILI) with Interferon Alpha-2B (IFN) has been shown to be a viable non-surgical treatment method for select PD patients. We have previously published data showing significant improvement in penile curvature with IFN ILI irrespective of coincident PTT, but we have not evaluated whether PTT in combination with ILI results in changes in post-treatment curvature, length, or circumference vs. ILI alone.

Patients and Methods: In order to begin to address this question, a retrospective records review was performed on patients undergoing ILI between 2001 and 2012 at our institution. During this time period, 125 patients underwent a median number of 12 biweekly ILI with 2E6 units of IFN using the multi-puncture technique. 42 of those patients utilized the PTT device. Results of pre and post-treatment penile duplex ultrasonography were reviewed and analyzed.

Results: Average change in curvature was 7.6° in PTT/ILI and 9.6° in ILI (p=0.48). Penile length post-injection was +0.04 and +0.13cm for ILI/PTT and ILI groups respectively (p=.68), while average change in circumference was +0.24 and +0.21 cm (p=.85).

Conclusion: From these data, addition of PTT to ILI for the treatment of PD does not appear to confer an advantage in terms of change in penile curvature or increase in penile length or circumference.

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DIABETIC AND NON-DIABETIC PEYRONIE'S PATIENTS: EVALUATION OF PRESENTING SYMPTOMS, SURGICAL MANAGEMENT AND OUTCOMES

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Diabetes Mellitus (DM) has been considered a risk factor for Peyronie's disease (PD). It's been established that the prevalence of PD is increased in DM. Studies have also demonstrated increased severity of PD in patients with DM and symptomatic improvement after DM treatment. No studies have evaluated PD surgery outcomes between DM and non-DM patients.

A retrospective analysis using our institution's PD database from 1993–2011 identified 106 men with DM and PD. We created an age and disease duration matched control group of 200 non-DM men. We compared for presenting symptoms (pain, curvature, length loss and erection quality, objective data (flow velocity, curvature, and calcified plaque size), surgical intervention (tunica albuginea plication [TAP], grafting [PEG] and inflatable penile prosthesis [IPP]) and post-op outcomes (residual curvature, erection quality and penile shortening).

Men with DM were less likely to present with pain and curvature (P 0.039 and <0.0001), had more length loss (P 0.021) and lower average erection quality scores. Duplex assessment showed worse curvature (P 0.038) and lower average PSV (P 0.005) in the DM men. There was a trend towards the presence of calcified plaques in DM. More men in the DM group underwent IPP. There was no significant difference between the groups regarding TAP and PEG procedures or post-op complaints/complications.

This study suggests that men with PD and DM are less likely to present with pain and curvature, have more length loss and worse erection quality compared to controls. The impact of PD on erection quality was greater in men with DM explaining why more DM men required IPP. Surgical outcomes do not appear statistically different compared to controls, due to proper patient selection following published treatment algorithms.

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PHASE 3, OPEN-LABEL STUDY OF THE SAFETY AND EFFECTIVENESS OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN MEN WITH PEYRONIE'S DISEASE

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Introduction: Collagenase clostridium histolyticum (CCH) is an experimental, nonsurgical therapy being evaluated for treatment of Peyronie's disease (PD). Results are reported from an open-label study on the safety and effectiveness of CCH in men with PD.

Materials and Methods: This phase 3, open-label study enrolled CCH-naïve men, including those who had received placebo in a previous phase 2 study. Each treatment cycle included 2 injections of CCH (0.58 mg) separated by approximately 24–72 hours (plaque

modeling conducted 24–72 hours after the second injection). The treatment cycle was repeated after about 6 weeks for up to 4 treatment cycles. The co-primary endpoints were the change in penile curvature deformity (PCD) and the symptom bother score from the PD questionnaire (PDQ; range, 0–16) from baseline to Week 36.

Results: 238 men were included in the modified intent-to-treat (mITT) population (both a PCD measurement and a PDQ response at baseline and at least 1 subsequent time point) with mean baseline PCD of 53.0° and the PD symptom bother score of 7.3. Both co-primary endpoints reached statistical significance by Week 36 compared to baseline. The mean percent reduction in PCD was 34.4% (95% CI, 31.2%, 37.6%). Most AEs were mild or moderate in severity and occurred at the site of injection. Three men had a serious treatment-related AE (2 penile hematomas, 1 corporal rupture); all events resolved prior to study completion.

Conclusion: In this study, intralesional injection of CCH lead to a potentially clinically meaningful and statistically significant percent reduction in PCD and improvement of PD symptom bother score in men with PD. CCH was generally well tolerated, with AEs primarily occurring at the site of injection.

Supported by: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA.

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SAFETY PROFILE OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN THE TREATMENT OF PEYRONIE'S DISEASE WHEN PENILE CURVATURE $\geq 30^\circ$ OR $<30^\circ$: TWO DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

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Peyronie's disease (PD) was examined in 2 large identical phase 3 randomized, double-blind, placebo-controlled studies (Investigation for Maximal Peyronie's Reduction Efficacy and Safety Studies [IMPRESS] I and II). We examined whether adverse events (AEs) differed between injections received when penile curvature deformity (PCD) was $\geq 30^\circ$ versus $<30^\circ$.

Materials and Methods: Combined data from CCH-treated subjects (N=551) within IMPRESS I and II were examined. CCH treatment included a maximum of 4 treatment cycles, each separated by 6 weeks. Subjects received up to 8 CCH injections (0.58 mg), 2 injections per cycle separated by approximately 24–72 hours (plaque modeling conducted 24–72 hours after second injection). All subjects received the treatment cycle 1 CCH injection at PCD $\geq 30^\circ$. CCH injection at PCD $<30^\circ$ could occur at the 2nd through 4th treatment cycles.

Abstract 105, Project ID: 3
SMSNA 2023: 30 degree safety

Table 1: Common (>1%) Treatment-Emergent Adverse Events by Frequency in Subjects Who Received at Least 1 Dose of CCH at Curvature $\geq 30^\circ$ and $<30^\circ$

Prefixed Term	Subjects given at $\geq 30^\circ$ (n=274)	Subjects given at $<30^\circ$ (n=277)
Injection site pain	100 (36.5%)	100 (36.1%)
Injection site swelling	75 (27.4%)	75 (27.1%)
Injection site bruising	65 (23.7%)	65 (23.5%)
Injection site redness	55 (20.1%)	55 (19.9%)
Injection site tenderness	50 (18.2%)	50 (18.1%)
Injection site itching	45 (16.4%)	45 (16.2%)
Injection site numbness	40 (14.6%)	40 (14.4%)
Injection site burning	35 (12.8%)	35 (12.6%)
Injection site dryness	30 (11.0%)	30 (10.9%)
Injection site discoloration	25 (9.1%)	25 (9.0%)
Injection site irritation	20 (7.3%)	20 (7.2%)
Injection site soreness	15 (5.5%)	15 (5.4%)
Injection site pain on touch	10 (3.6%)	10 (3.6%)
Injection site pain on movement	5 (1.8%)	5 (1.8%)
Injection site pain on intercourse	5 (1.8%)	5 (1.8%)
Injection site pain on masturbation	5 (1.8%)	5 (1.8%)
Injection site pain on showering	5 (1.8%)	5 (1.8%)
Injection site pain on walking	5 (1.8%)	5 (1.8%)
Injection site pain on sitting	5 (1.8%)	5 (1.8%)
Injection site pain on standing	5 (1.8%)	5 (1.8%)
Injection site pain on lying down	5 (1.8%)	5 (1.8%)
Injection site pain on bending over	5 (1.8%)	5 (1.8%)
Injection site pain on coughing	5 (1.8%)	5 (1.8%)
Injection site pain on sneezing	5 (1.8%)	5 (1.8%)
Injection site pain on laughing	5 (1.8%)	5 (1.8%)
Injection site pain on crying	5 (1.8%)	5 (1.8%)
Injection site pain on shouting	5 (1.8%)	5 (1.8%)
Injection site pain on whispering	5 (1.8%)	5 (1.8%)
Injection site pain on normal voice	5 (1.8%)	5 (1.8%)
Injection site pain on deep voice	5 (1.8%)	5 (1.8%)
Injection site pain on high-pitched voice	5 (1.8%)	5 (1.8%)
Injection site pain on low-pitched voice	5 (1.8%)	5 (1.8%)
Injection site pain on normal breathing	5 (1.8%)	5 (1.8%)
Injection site pain on deep breathing	5 (1.8%)	5 (1.8%)
Injection site pain on shallow breathing	5 (1.8%)	5 (1.8%)
Injection site pain on rapid breathing	5 (1.8%)	5 (1.8%)
Injection site pain on slow breathing	5 (1.8%)	5 (1.8%)
Injection site pain on normal heart rate	5 (1.8%)	5 (1.8%)
Injection site pain on fast heart rate	5 (1.8%)	5 (1.8%)
Injection site pain on slow heart rate	5 (1.8%)	5 (1.8%)
Injection site pain on normal blood pressure	5 (1.8%)	5 (1.8%)
Injection site pain on high blood pressure	5 (1.8%)	5 (1.8%)
Injection site pain on low blood pressure	5 (1.8%)	5 (1.8%)
Injection site pain on normal heart rate and blood pressure	5 (1.8%)	5 (1.8%)
Injection site pain on abnormal heart rate and blood pressure	5 (1.8%)	5 (1.8%)
Injection site pain on normal heart rate, blood pressure, and temperature	5 (1.8%)	5 (1.8%)
Injection site pain on abnormal heart rate, blood pressure, and temperature	5 (1.8%)	5 (1.8%)
Injection site pain on normal heart rate, blood pressure, temperature, and pulse	5 (1.8%)	5 (1.8%)
Injection site pain on abnormal heart rate, blood pressure, temperature, and pulse	5 (1.8%)	5 (1.8%)

The data are presented as n (%). The percentages are based on the total number of subjects who received at least 1 dose of CCH at the specified curvature. The percentages are rounded to the nearest whole number.

Results: The frequency of common (>1%) treatment-emergent AEs was comparable between injections received at PCD $\geq 30^\circ$ and injections received at PCD $<30^\circ$ (Table 1) across treatment cycles 2 through 4.

Conclusion: The IMPRESS I and II studies showed no clinically meaningful difference in the frequency of treatment-emergent AEs when CCH injections were received at PCD $\geq 30^\circ$ versus $<30^\circ$.

Supported by: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA.

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LONG-TERM OUTCOMES AND PATIENT SATISFACTION AFTER YACHIA CORPOROPLASTY FOR PEYRONIE'S DISEASE: A SINGLE INSTITUTIONAL REVIEW

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Introduction: Surgical intervention for Peyronie's disease (PD) is indicated when the degree of penile curvature or pain during erection is too significant for sexual intercourse. The objective of this study was to review our experience with the Yachia corporoplasty (YC) and long-term patient satisfaction outcomes. Materials and Methods: Between October 1998 and April 2012, 94 patients underwent YC for PD. Seventy-three patients (77.7%) had follow-up and 45 patients (47.9%) were available for a telephone survey. Variables of interest included prior medical treatment and surgery, preoperative curvature direction and pre- and postoperative degree of curvature. Survey questions addressed sexual experience, penile length, erectile pain, patient satisfaction (5-point Likert scale) and whether they would have the procedure again.

Results: Median age was 56 (range 16–75) years. Forty-one patients (56.2%) had medical therapy and 8 patients (11.0%) reported prior surgery. Median degree of preoperative curvature was 60 degrees (range 15–90; mean 61 ± 25) and the most common direction was lateral curvature (n=36, 49.3%). The median postoperative degree of curvature was 0 degrees (range 0–45; mean 10 ± 15). The mean follow-up time from surgery to telephone survey was 4.6 ± 3.7 years. Thirty-nine patients (86.7%) felt improved sexual experience and 40 patients (88.9%) denied erectile pain, however 42 patients (93.3%) felt like their penis was shorter. Median patient satisfaction score was 3.5 (range 1–5) and 35 patients (77.8%) reported they would have YC again.

Conclusions: Long-term outcomes of YC for PD demonstrate procedural durability with a high degree of patient satisfaction, improvement in symptoms, enhancement of sexual experience and a majority of patients who would repeat the procedure.

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CLINICAL EVALUATION OF TREATMENT OF PEYRONIE'S DISEASE WITH COLLAGENASE CLOSTRIDIUM HISTOLYTICUM: ANALYSIS OF PENILE CURVATURE DEFORMITY BY DURATION OF DISEASE AND PLAQUE CALCIFICATION
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Introduction: Three phase 3 studies have been conducted to examine the safety and efficacy of collagenase clostridium histolyticum (CCH) in subjects with Peyronie's Disease (PD). The effect of CCH on change in penile curvature deformity (PCD) from baseline to end of study was analyzed by the subject's duration of disease or degree of plaque calcification.
Materials and Methods: All subjects within the phase 3 studies (2 randomized, double-blind, placebo-controlled; 1 open label) who were treated with CCH received up to 8 injections of CCH (0.58 mg) with 2 injections per cycle separated by approximately 24–72 hours (plaque modeling conducted 24–72 hours after second injection). Up to 4 cycles were allowed, with about 6 weeks between each cycle. Penile x-ray or ultrasound findings were used to determine the degree of plaque calcification.
Results: There was a 33.7% reduction in mean PCD for CCH-treated subjects (n=776). CCH-treated subjects were stratified by duration of disease: 1–2 years, >2 to ≤4 years, and >4 years; percent reductions in mean PCD were 28.6%, 34.8%, and 38.9%, respectively. For subjects with no calcification, non-contiguous stippling, and contiguous calcification that did not interfere with the injection, percent reductions in mean PCD were 34.8%, 33.8%, and 27%, respectively.
Conclusions: CCH treatment resulted in improved PCD regardless of duration of disease or degree of plaque calcification; although small differences were noted within the subgroups, they are not expected to be clinically meaningful.
Supported by: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA.

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INTEGRATED SAFETY PROFILE OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN CLINICAL STUDIES EVALUATING THE TREATMENT OF PEYRONIE'S DISEASE
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Introduction: Collagenase clostridium histolyticum (CCH) is a nonsurgical injection being studied for the treatment of Peyronie's disease (PD). This report summarizes the integrated safety of subjects treated with CCH in 7 clinical studies (4 phase 2; 3 phase 3).
Materials and Methods: The safety population includes subjects

(N=1044) treated with at least 1 injection of CCH (0.58 mg) in phase 2–3 clinical trials. Each treatment cycle consisted of 2 injections (phase 2, up to 9 injections/subject; phase 3, up to 8 injections/subject) with about 6 weeks between each cycle.
Results: Of the 1044 subjects, 67.4% received 8 injections and 913 (87.5%) subjects completed their assigned study. Seventeen subjects discontinued due to an adverse event (AE; 9 were considered treatment related). At least 1 AE was reported by 966 (92.5%) subjects, and common AEs were either local to the penis or injection site (Table 1). Nine subjects experienced nonfatal serious AEs considered related to CCH treatment (5 penile hematoma, 4 corporal rupture), resulting in interruption of treatment or drug withdrawal in 7 of 9 cases. There were 3 deaths among the CCH-treated population, but none were considered treatment related.
Conclusions: Our review of the safety of CCH for treatment of PD shows that adverse experiences were predominantly nonserious and localized, and serious AEs were localized to the penis in these clinical studies.
Supported by: Auxilium Pharmaceuticals, Inc., Chesterbrook, PA, USA.

Table 1. Common (>5%) Nonserious Treatment-Related Adverse Events by Frequency in Subjects Who Received at Least One Dose of CCH

Preferred Term	Adverse Event N=1044 (%)
Penile hematoma*	524 (50.2)
Penile pain	350 (33.5)
Penile swelling	302 (28.9)
Injection site pain	252 (24.1)
Injection site hematoma	205 (19.6)
Penile hemorrhage*	193 (18.5)
Penile edema	139 (13.3)
Injection site swelling	135 (12.9)
Injection site hemorrhage	118 (11.3)
Contusion	74 (7.1)

*82.7% of treatment-related AEs of penile hematoma had the verbatim "penile bruising"
*100% of penile hemorrhage had the verbatim "penile ecchymosis"

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DORSAL PPLICATION WITHOUT DEGLOVING FOR CORRECTION OF ADULT VENTRAL PENILE DEFORMITIES
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Objectives: Penile plication (PP) without circumcision is the predominant treatment for penile curvature deformities at our institution. The vast majority of patients presents with dorsal and/or lateral curvature, and are thus amenable to correction through a penoscrotal incision. We present our experience performing dorsal penile plication (DPP) without degloving for patients with ventral curvature.
Methods: DPP was performed through a 2.5 cm longitudinal, proximal dorsal penile incision without degloving. Patients who had undergone DPP from 2008 to 2013 were reviewed. Angle of correction, number of sutures, stretched penile length (SPL) and post-operative patient reported questionnaires were compared to those of ventral (VPP) and lateral (LPP) penile plication patients.
Results: Of 190 patients who underwent PP during the study

period, complete post-op data (mean 13 months) was available for 128 (67%): 18 (14%) underwent DPP with a mean pre-op ventral curvature of 53 degrees corrected to 6 degrees (average 10 sutures, range 7–20). All patients reported improvement in ventral curvature and overall condition. While 12 (67%) reported subjective penile shortening, quantitative change in SPL was insignificant (average 15.1 cm pre-op versus 15.0 cm post-op; $P=0.65$). 16 (89%) reported an erection adequate for penetration without medication use. Among DPP, VPP and LPP cohorts, there were no differences in average number of sutures used (10, 7 and 8; $P=0.29$), degrees corrected per suture (6, 5 and 5; $P=0.86$) and change in SPL (-0.3 cm, 0.0 and -0.1 ; $P=0.09$), respectively. Conclusion: Dorsal plication is an effective technique for correction of ventral penile deformities. Results of DPP for ventral deformities are comparable to VPP and LPP for dorsal and lateral curvatures.

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DETERMINATION OF THE PARENTAL KNOWLEDGE AND BEHAVIORAL PATTERN ON CIRCUMCISION

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Introduction: Aim of this study was to investigate general knowledge status and behavioral pattern of the parents on circumcision during the admission to the in-patient clinic for circumcision.

Material and Methods: All data were collected from 107 parents whose admitted to our clinic for their children's circumcision procedure. All the parents filled up a questionnaire form which includes 22 question and 2 separate section with face to face personal interview to obtain information about on circumcision.

Results: The mean age of the children was 8.16 ± 1.1 years. The parental mean age for the mothers was 33.7 ± 6.4 years and for the fathers was 38.1 ± 5.2 years. Twenty-five percent of the parents have at least one circumcised boy previously and nearly half of the cases circumcision had been performed after the five years of age. 34% of the fathers had circumcised after 5 years of age at home (80%). Most prominent memories of the fathers about on their circumcision are fear (60%) and pain (40%). In this series, nearly 65% of the parents are in consensus with the child about circumcision and circumcision timing. Major circumcision indication in this study was religious orders. No statistical significant difference was found for the preference of circumcision age between the mothers and fathers.

Conclusion: In our country, major indication for circumcision is religious orders. The parents have been found not enough general knowledge previously about the potential benefits or contraindications and complications of the circumcision. Therefore, parental education is very important before circumcision to increase general knowledge and awareness about importance and complications of circumcision to increase future reproductive health.

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CROSS-SECTIONAL ANALYSIS OF PENDULOUS, STRETCHED, AND ERECT PENILE LENGTH MEASUREMENTS IN PEYRONIE'S DISEASE

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The most common complaint in Peyronie's Disease (PD) patients, besides curvature, is penile shortening. We sought to determine the relationship between pendulous (flaccid), stretched, and erect penile lengths in groups of Peyronie's and non-Peyronie's patients undergoing penile duplex Doppler ultrasonography.

The flaccid, stretched, and erect penile lengths were measured in a group of 430 men (ages 17–80 yrs), 316 with PD and 114 without PD. The correlations between stretched, pendulous, and erect lengths were determined by Pearson's analysis. The pendulous, stretched, and erect lengths as well as percentage of change in length were compared between the two groups using an unpaired t-test.

A higher correlation was observed between stretched and erect length than between pendulous and erect length ($P<0.0001$). The mean percent change from pendulous to erect length was 37.38 ± 16.53 in PD patients and $44.01 \pm 20.37\%$ in non-PD patients. The mean percent change from stretched to erect length was only 2.11 ± 9.18 in PD patients and $4.77 \pm 11.17\%$ in non-PD patients. There was no difference in pendulous or stretched length between the two groups ($P=0.47$ and $P=0.71$ respectively). The percent change in both pendulous to erect length and stretched to erect length was greater in the non-PD group than in the PD group ($P=0.0006$ and $P=0.0128$, respectively).

Initial measurements of pendulous and stretched penile lengths may indicate ultimate gain in length of the erect penis. Patients afflicted with PD had no significant difference in pendulous or stretched length from those without PD. Although there was a small difference between the two groups in erect penile length, it was not statistically significant. PD patients experienced less gain between pendulous or stretched and erect lengths than non-PD patients.

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EARLY VERSUS LATE IMPROVEMENT WITH INTRALESIONAL VERAPAMIL THERAPY TO TREAT PEYRONIE'S DISEASE

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An understanding of when to expect improvement in penile curvature or plaque size after initiating intralesional verapamil (ILV) therapy for treatment of Peyronie's disease is not well defined. A retrospective review of 24 men with Peyronie's disease who completed a protocol of 12, 20mg intralesional verapamil (ILV) injections every 2 weeks was conducted. A penile duplex Doppler ultrasound was performed at baseline (i.e. before initiation of treatment), after 6 ILV injections, and after the 12th injection to determine blood flow dynamics and plaque size. Penile curvature was assessed via goniometer during each ultrasound visit. Responders were defined as men with a measureable decrease in either penile curvature or plaque size (PS) at completion of 12 injections, relative to baseline. At baseline, mean patient age was 58.4 ± 8.7 years, serum total testosterone (TT) was 521.4 ± 220.8 ng/dl, and free testosterone

(FT) 9.4 ± 5.8 ng/dl. Mean degree of curvature (DOC) at baseline was $45.8 \pm 25.7^\circ$, PS $220.1 \pm 190.2\text{mm}^3$. 22/24 patients (91.7%) were responders. Of those patients with a measurable decrease in DOC (16/24, 66.7%), mean decrease between baseline and the 6th ILV injection was $16.9 \pm 7.0^\circ$ ($p<0.05$). Mean decrease in DOC between the 6th and 12th injection was $5.5 \pm 4.2^\circ$ ($p=0.213$). Of those patients with a measurable decrease in PS (18/24, 75%), mean decrease between baseline and the 6th injection was $152.7 \pm 52.1\text{mm}^3$ ($p<0.05$). Mean decrease in PS between the 6th and 12th injection was $22.1 \pm 21.8\text{mm}^3$ ($p=0.326$). Our data suggest that of those men who respond to ILV for treatment of Peyronie's disease, significant improvement in both DOC and plaque size is mainly seen after the first 6 injections. Less improvement in PS and DOC are seen during the last 6 injections.

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CLINICAL OUTCOMES OF COLLAGENASE CLOSTRIDIUM HISTOLYTICUM IN THE TREATMENT OF SUBJECTS WITH PEYRONIE'S DISEASE BY SUBGROUPS: TWO LARGE DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED PHASE 3 STUDIES

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Introduction: Two large identical phase 3, randomized, double-blind, placebo-controlled studies (Investigation for Maximal Peyronie's Reduction Efficacy and Safety Studies [IMPRESS] I and II) examined efficacy of collagenase clostridium histolyticum (CCH) in subjects with Peyronie's disease (PD). Co-primary endpoints, percent change in penile curvature deformity and PD symptom bother score from the PD questionnaire (PDQ), were used to examine CCH treatment outcomes from baseline to 52 weeks within subgroups.

Materials and Methods: Combined data from CCH-treated subjects (N=401) from IMPRESS I and II were examined. CCH treatment included a maximum of 4 treatment cycles, each separated by approximately 6 weeks. Subjects received up to 8 CCH injections (0.58 mg), 2 injections per cycle separated by about 24–72 hours (plaque modeling conducted 24–72 hours after second injection). Subgroup analyses examined prior PD treatment (Y/N), International Index of Erectile Function (IIEF) scores, and prostatectomy history (Y/N) at baseline.

Table 1: Mean Percent Change in Penile Curvature and Mean Change in PD Symptom Bother Score in Subjects Treated With CCH From Baseline to Week 52*

Baseline Characteristics	n	Penile Curvature Deformity, % Change (mean)	Change in PD Symptom Bother Score (mean)
Prior PD treatment			
Yes	227	-34.8	-2.6
No	174	-33.0	-3.1
IIEF Erectile Function Severity ^b			
Score 1-5: No sexual activity	16	-28.0	-2.9
Score 6-16: Low erectile function	67	-27.6	-3.5
Score >17: High erectile function	314	-35.6	-2.7
History of Prostatectomy			
Yes	11	-31.4	-2.5
No	390	-34.1	-2.8

*Last observation carried forward (LOCF)

^bFour subjects did not have a baseline IIEF-EF score and were excluded from this analysis

Results: Improvements in co-primary outcomes from baseline to 52 weeks were observed in the CCH-treated subjects with no clinically meaningful differences between subgroups (Table 1).

Conclusion: The IMPRESS I and II studies show improved clinical outcomes following CCH-treatment regardless of subjects' baseline PD treatment history, erectile function scores, and or prostatectomy history.

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ERECTILE DYSFUNCTION SECONDARY TO PENILE ARTERY STEAL SYNDROME (PASS)

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Penile revascularization is a re-emerging surgical approach ideally suited for young patients with isolated vasculogenic erectile dysfunction (ED). We discuss techniques of revascularization and present a 27-year-old man with severe organic ED attributed to a traumatic fall onto his back at age 14. Initial penile doppler demonstrated arterial insufficiency (SHIM score=1), and the patient underwent revascularization surgery. Repeat penile Doppler revealed and a subsequent arteriogram revealed a left-sided steal phenomenon due to an aberrant obturator artery (AOA), with the absence of flow through the left cavernosal artery. The patient underwent embolization of the AOA, with resultant return of erectile function in combination with baseline medical therapy (SHIM=20). This case suggests Penile Artery Steal Syndrome (PASS) as a cause of ED secondary to post-revascularization phenomena.



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BONE SAW FOR CALCIFIED PEYRONIE'S DISEASE PLAQUES

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Introduction: Calcified Peyronie's Disease plaques are rare and surgically difficult to treat. Several techniques have been described to remove or cut through the ossified plaque with varying success. Excision of the plaque often results in erectile dysfunction with shortening and deformity of the penis. Our goal is to determine the incidence in a tertiary referral center and describe a new surgical treatment option using a soft tissue-protecting bone saw

Materials & Methods: We performed a review of all Peyronie's Disease patients who were surgically treated from 10/1996 - 12/2012. We identified patients who required the use of the TPS Bone saw and evaluated for post-operative complications, type of surgery performed and erectile function.

Results: 100 surgical patients required surgery for their Peyronie's Disease. Six patients required use of the bone saw due to severe calcification; four with SIS grafts and two with inflatable penile prosthesis. The saw was used to make transverse incisions in the plaque to allow for a straight erection. There were no surgical complications and both IPP patients had working prosthesis at >8yrs. One of the SIS grafted patients required re-operation for more proximal curvature 11months later and ultimately required an IPP.

Conclusions: Calcified Peyronie's disease plaques are rare. The vibrating bone saw is a novel technique to incise calcified plaques before grafting or IPP placement. The saw's advantages are that there is no loss of length or physical deformity of the penis, it is readily available in most operating rooms, has an easy to use handle control and that due to the micro-vibration action it does not cut through soft tissue.

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DIRECT EFFECTS OF TADALAFIL ON LOWER URINARY TRACT SYMPTOMS VS INDIRECT EFFECTS MEDIATED THROUGH ERECTILE DYSFUNCTION SYMPTOM IMPROVEMENT: INTEGRATED ANALYSES OF 4 PLACEBO-CONTROLLED CLINICAL STUDIES

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Introduction: Tadalafil is FDA-approved for men with signs and symptoms of benign prostatic hyperplasia (BPH), erectile dysfunction (ED) and BPH + ED. This study assessed whether tadalafil for BPH-associated lower urinary tract symptoms (LUTS) is independent of improvements in ED.

Patients and Methods: Integrated data from 4 randomized controlled trials in men with LUTS/BPH ± ED were statistically analyzed to test whether total International Prostate Symptom Score (IPSS) improvement was due to improvement in International Index of Erectile Function-Erectile Function domain score (IIEF-EF). Uni- and bi-directional path analysis models determined

direct and indirect treatment effects mediated by improvements in LUTS and ED (i.e., is improvement of one condition a mediator for the treatment effect on the other?).

Results: A total of 1496 men received ≥1 dose of tadalafil 5 mg once daily or placebo; 77% had ED. Placebo-adjusted treatment effect for men with ED was represented by a mean decrease of -2.3 (p<0.0001) in total IPSS vs. -2.2 (p=0.0007) for men without ED. Correlation between change from baseline in total IPSS and IIEF-EF was weak (r=-0.29; p<0.0001). Uni-directional path analysis suggested that total treatment effect on IPSS score improvement (2.25) was derived from: 1) a direct treatment effect of 1.57 (70% of total effect; p<0.001) and 2) an indirect treatment effect of 0.67 (30% via IIEF-EF improvement; p<0.001). Bi-directional path analysis showed that IPSS improvement was largely attributed to direct (92.5% of total effect; p<0.001) vs. indirect treatment effects via IIEF-EF improvement (7.5%; p=0.32).

Conclusion: Tadalafil appreciably improves LUTS/BPH independent of improvements seen in ED.

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TREATMENT OF LUTS SECONDARY TO BPH WHILE PRESERVING SEXUAL FUNCTION: RANDOMIZED CONTROLLED STUDY OF PROSTATIC URETHRAL LIFT

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Introduction: We analyze data obtained from a randomized controlled blinded study of the Prostatic Urethral Lift (PUL) to evaluate the sexual side effects of this novel treatment. We sought to determine whether PUL, when conducted in a randomized study, significantly improves LUTS and urinary flow rate while preserving sexual function.

Patients and Methods: Men ≥50 years with prostates 30-80cc, International Prostate Symptom Score (IPSS)>12, and a peak urinary flow rate (Qmax)≤12 ml/s were randomized 2:1 between PUL and sham. Groups were compared at 3 months and PUL followed to 12 months with IPSS, Sexual Health Inventory for Men (SHIM) and Male Sexual Health Questionnaire for Ejaculatory Dysfunction (MSHQ-EjD). Subjects were censored from sexual function measures if they were inactive or had severe ED. Secondary analysis of subjects stratified by ED severity was conducted.

Results: There was no evidence of degradation in erectile or ejaculatory function after PUL. SHIM and MSHQ-EjD were not different from control at 3 months but were improved from baseline at 1 year. Ejaculatory bother score was improved from control and baseline. SHIM was improved from baseline for men entering the study with severe ED, p=0.011. IPSS and Qmax were superior to control and sustained at 1 year. There was no instance of de novo

sustained erectile or ejaculatory dysfunction.

Conclusion: The Prostatic Urethral Lift improves LUTS and urinary flow while preserving erectile and ejaculatory function.

Table 1: Randomized comparison between PUL and sham at 3 months and 12 month PUL compared to baseline.

Measure	Sham 3 Months			PUL 3 Months			p-value	PUL 12 Months		
	n	Baseline 3 Mo	Change	n	Baseline 3 Mo	Change		n	Baseline 12 Mo	Change p-value
IPSS	66	24.4, 5.8 18.5, 8.6	-5.9, 7.7	140	22.2, 5.5 11.2, 7.7	-11.1, 7.7	0.003	123	21.8, 5.4 11.1, 7.0	-10.8, 7.0 <0.001
Qmax	56	7.9, 2.4 9.9, 4.3	2.0, 4.9	126	8.0, 2.4 12.3, 5.4	4.3, 5.2	0.005	103	8.1, 2.4 12.1, 5.4	4.0, 5.4 <0.001
SHIM	42	18.6, 5.3 19.2, 5.4	0.6, 3.6	80	18.0, 5.6 19.3, 6.3	1.3, 4.9	0.356	73	18.2, 5.4 18.6, 6.5	0.4, 5.1 0.013
MSHQ-EjD Function	42	9.1, 3.0 10.6, 3.2	1.5, 2.6	80	9.1, 3.1 11.3, 3.2	2.2, 2.5	0.217	75	9.2, 3.1 10.5, 3.2	1.3, 2.5 <0.001
MSHQ-EjD Bother	42	2.0, 1.6 1.4, 1.6	-0.6, 1.5	80	2.0, 1.6 1.0, 1.3	-1.0, 1.4	0.088	75	2.0, 1.7 1.2, 1.3	-0.8, 1.6 <0.001

Mean, SD
p-values for IPSS, Qmax based on 2-sample t-test, p-values for SHIM, MSHQ-EjD based on OEE analysis

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EFFECTS OF THE ONCE DAILY CO ADMINISTRATION OF TADALAFIL WITH FINASTERIDE FOR 6 MONTHS IN MEN WITH LOWER URINARY TRACT SYMPTOMS AND PROSTATIC ENLARGEMENT SECONDARY TO BENIGN PROSTATIC HYPERPLASIA

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Introduction: Tadalafil (TAD) is indicated for symptoms of erectile dysfunction (ED) and benign prostatic hyperplasia (BPH). Finasteride (FIN) is indicated for BPH in men with enlarged prostate. BPH symptom improvement may occur within 1-2 wks with TAD; typically not before 6 months with FIN. Also, FIN may cause sexual adverse events (AEs), while TAD improves ED. We assessed the effects of TAD/FIN once daily co administration. Patients and Methods: Men ≥ 45 yrs with International Prostate Symptom Score (IPSS) ≥ 13 and prostate volume ≥ 30 mL were randomized to placebo (PBO) with FIN 5mg (PBO/FIN; N=350) or TAD 5mg with FIN 5mg (TAD/FIN; N=346) once daily for 26 wks. International Index of Erectile Function (IIEF) and IPSS were assessed at baseline and 4, 12, and 26 wks postbaseline. Patient-reported safety was assessed throughout study.

Results: 306 TAD/FIN and 286 PBO/FIN pts completed the study. In sexually active pts with ED at baseline (203 TAD/FIN; 201 PBO/FIN), TAD/FIN significantly improved (vs PBO/FIN) all IIEF outcomes (Table). Among all study pts, TAD/FIN significantly improved IPSS total scores (Table). 89% of AEs were mild to moderate; 1.9% of pts discontinued due to AEs. Among all study pts, 10 cases of ED and/or decreased/lost libido were reported for PBO/FIN; 1 case of ED was reported for TAD/FIN.

Conclusion: TAD/FIN once daily improved ED and BPH symptoms in men with BPH and enlarged prostate. Additionally, fewer sexual AEs were reported with TAD/FIN.

Weeks	Analysis Item ^a	IIEF Erectile Function	IIEF Intercourse Satisfaction	IIEF Overall Satisfaction	IPSS Total Score
4	LSTD ^b	4.85	1.82	1.01	-1.67
	95% CI	3.49, 6.21	1.18, 2.47	0.61, 1.40	-2.27, -0.90
12	LSTD ^b	4.08	1.59	1.06	-1.41
	95% CI	2.44, 5.60	0.88, 2.31	0.61, 1.51	-2.27, -0.55
26	LSTD ^b	4.73	1.98	1.22	-1.04
	95% CI	3.15, 6.31	1.23, 2.73	0.74, 1.69	-1.93, -0.15

a) Calculated using a mixed-effects model for repeated measures (MMRM) analysis using baseline total as the covariate, changes from baseline to Weeks 4, 12, and 26 as dependent variables, subject as a random effect, and treatment, visit, region, and treatment-by-visit interaction as fixed effects.
b) LSTD: LS treatment difference for TAD/FIN (vs PBO/FIN); all p-values ≤ 0.002 .

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EFFICACY OF TADALAFIL ONCE DAILY FOR TREATMENT OF ERECTILE DYSFUNCTION: THE INFLUENCE OF TESTOSTERONE LEVELS

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Introduction: Testosterone (T) deficiency can have a negative impact on sexual function and may decrease response to phosphodiesterase-5 inhibitors (PDE5I) in men with erectile dysfunction (ED). We determined the response to tadalafil (TAD) among eugonadal men and men with low T levels.

Patients and Methods: In a randomized controlled trial, men with a ≥ 3 -month history of ED and an International Index of Erectile Function-erectile function (IIEF-EF) domain score of < 26 were randomized to once daily TAD 2.5 mg titrated to 5 mg, TAD 5 mg, or placebo for up to 12 weeks following a 4-week PDE5I PRN lead in and 4-week washout period. Based on end of treatment T levels, men were retrospectively stratified into 2 cohorts: low T (< 300 ng/dL) and normal T. Efficacy of TAD was measured by least squares mean change from baseline to 12-week endpoint (last observation carried forward) in: IIEF-EF domain score and percentage of "yes" responses to SEP2 and SEP3.

Results: Outcomes from 503 men (166 TAD 2.5 \rightarrow 5 mg, 170 TAD 5 mg, 167 TAD placebo) are summarized in the Table below.

Conclusions: Responses to TAD once daily were statistically ($p < 0.05$) and clinically significantly improved in both normal and low T cohorts compared to placebo. Responses to TAD once daily were numerically higher in eugonadal men compared to men with low T levels. Evaluating and correcting T levels may improve responses to PDE5I treatment.

Cohort	Treatment Group	IIEF-EF	SEP 2	SEP 3
Low T	Placebo	1.4	10.1	19.2
	TAD 2.5 \rightarrow 5 mg	7.4	25.4	36.2
	TAD 5 mg	7.5	26.4	39.6
Normal T	Placebo	1.9	7.8	8.2
	TAD 2.5 \rightarrow 5 mg	8.9	27.8	39.7
	TAD 5 mg	9.5	27.4	42.6

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SATISFACTION WITH TADALAFIL OR TAMSULOSIN ONCE DAILY FOR THE TREATMENT OF LUTS/BPH: TREATMENT SATISFACTION SCALE QUESTIONNAIRE RESULTS FROM A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED TRIAL
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In a study of daily tadalafil 5 mg (N=171) or tamsulosin 0.4 mg (N=167) vs. placebo (N=172) for 12-weeks for LUTS/BPH, only tadalafil improved the Treatment Satisfaction Scale-BPH (TSS). We assessed treatment effects at endpoint on TSS including subscores, subgroups, and individual questions. Median treatment differences were analysed via the van Elteren test, with p-values via Wilcoxon's rank sum statistic. The percentage of TSS positive (responses 1&2), neutral (3), or negative (4&5) responses were analyzed vs. placebo via the Cochran-Mantel-Haenszel test. Lower TSS total scores (range 0–100; lower scores = greater satisfaction) with tadalafil were driven by the satisfaction with efficacy sub-score (median difference vs. placebo, -6.3; p=.003), with no difference for satisfaction with dosing or side effects. TSS total scores were significant for tadalafil vs. placebo among men with moderate LUTS at baseline (-4.4; p=.006), ≤65 years of age (-6.7; p=.013), and previous alpha-blocker therapy (-11.1; p=.002). 66.5% of men rated tadalafil treatment as effective/very effective for LUTS/BPH (Q1; vs. placebo, p=.011); 72.6% would definitely/probably recommend their treatment (Q3; p=.043); 71.8% were generally very satisfied/satisfied with their medication (Q8; p<.003); and 65.0% would definitely/probably continue taking it (Q10; p=.035). With tamsulosin, TSS was not significantly different vs. placebo overall (p=.457), for subscores (all p≥.377), subgroups (all p≥.212), or individual questions (all p≥.071). Treatment satisfaction with tadalafil was driven by satisfaction with efficacy and was also significant among men with moderate LUTS, ≤65 years of age, or with prior alpha-blocker use. Most men on tadalafil rated treatment effectiveness positively and were generally satisfied with treatment.

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RANDOMIZED, CONTROLLED STUDY OF THE SAFETY AND EFFICACY OF SILDENAFIL FOR THE TREATMENT OF RECURRENT ISCHEMIC PRIAPISM ASSOCIATED WITH SICKLE CELL DISEASE

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Introduction: Priapism affects nearly 40% of males with sickle cell disease (SCD). Based on our previous research and clinical observations of the "off-label" use of PDE5 inhibitors, we investigated the efficacy and safety of daily sildenafil in alleviating recurrent priapism in SCD patients. Our primary outcome was a 50% reduction (1-tier decrease) in priapism episodes over the ensuing 2 weeks after treatment.

Material and Methods: We enrolled 13 patients with priapism and SCD in a two-stage 16-week trial. In the placebo-controlled double-blinded stage, patients were randomized to either sildenafil 50mg once daily (n=6) or placebo (n=7) for 8 weeks. In the open-label stage, remaining participants (n=8) received sildenafil 50 mg once daily for another 8 weeks. Patients were followed by monthly in-person evaluations and biweekly phone calls using the Priapism/Sexual Activity Log. Patients were selected from an initial pool of over 100 patients, based on extremely stringent enrollment criteria.

Results: At 8 weeks, 3 patients (50%) in the sildenafil group and 3 patients (43%) in the placebo group met the primary end-point. One patient (17%) in the sildenafil group and 2 patients in the placebo groups (29%) had > 50% reduction (a 2-tier decrease) in episodes. A total of 8 patients advanced to the 8-week open-label stage. At its conclusion, 4 patients (50%) met the primary end-point, with 2 patients (25%) with >50% (>2-tier range) reduction in episodes. Individuals lost to follow-up or who failed to comply with the study drug treatment regimen were included in the intention to treat analysis. No major adverse events were observed.

Conclusion: Sildenafil is safe and may be effective in the treatment of recurrent ischemic priapism associated with SCD.

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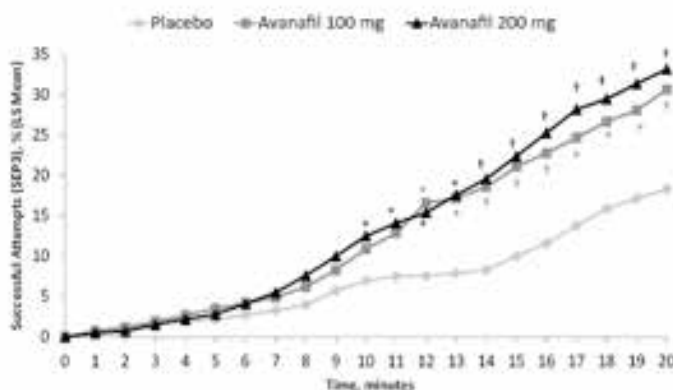
ERECTOGENIC EFFECT OF AVANAFIL WITHIN 15 MINUTES OF DOSING IN MEN WITH MILD TO SEVERE ERECTILE DYSFUNCTION

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Avanafil is a rapidly absorbed, highly specific PDE5 inhibitor with a time to maximum concentration of 30–45 minutes. This study examined the therapeutic effects of avanafil approximately 15 minutes after dosing in men with mild to severe erectile dysfunction (ED). In this double-blind, 12-week (4-week run-in; 8-week treatment period) phase 4 study, subjects were randomized to placebo (n=145), avanafil 100 mg (n=147), or avanafil 200 mg (n=148). Subjects were issued a stopwatch for time-keeping and

Figure. Percentage of Successful Intercourse Attempts (SEP3), by Time, Post-Dosing Over an 8-Week Treatment Period (ITT)



*P<.05 vs placebo, **P<.003 vs placebo

ITT, intent-to-treat population; LS, least squares; SEP3, satisfactory completion of sexual intercourse

were encouraged to attempt intercourse approximately 15 minutes post-dosing. The primary endpoint was the percentage of sexual attempts that had an erectogenic effect within 15 minutes post dosing, resulting in satisfactory completion of sexual intercourse (SEP3). Here we present SEP3 by time from dose administration. At baseline, mean age was 58.2 ± 10.2 years (range 24–86); 41.4% of subjects had severe ED; and mean duration of ED was 88.5 ± 70.1 months. By study end, a significant difference in the percentage of successful intercourse attempts was observed at 10 minutes with the 200-mg dose ($P < .05$ vs placebo) and at 12 minutes for the 100-mg dose ($P < .05$ vs placebo) (Figure; ITT-LOCF). Common adverse events were headache, nasopharyngitis, and flushing. These data show that avanafil has an erectogenic effect in <15 minutes and is well-suited for on-demand treatment of ED.

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EFFICACY OF AS NEEDED PDE5 INHIBITOR THERAPY VS. TADALAFIL ONCE DAILY ON IMPROVEMENT IN ERECTILE DYSFUNCTION

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Introduction: Phosphodiesterase type 5 inhibitors (PDE5I) taken as needed (PRN) or once daily (OAD) are first-line therapies for treatment of erectile dysfunction (ED). This study evaluated whether tadalafil (TAD) OAD provided efficacy in men comparable to their responses following treatment with a maximum dose of a PRN PDE5I.

Patients and Methods: In this randomized, double-blind, placebo-controlled trial, men with ≥ 3 -mo history of ED received sildenafil (100 mg), vardenafil (20 mg), or TAD (20 mg) PRN for a 4-wk lead-in period. Men with an International Index of Erectile Function-erectile function (IIEF-EF) domain score < 26 completed a 4-wk washout period and were randomized to OAD TAD 2.5 mg titrated to 5 mg, TAD 5 mg, or placebo for ≤ 12 wks. Efficacy of TAD OAD vs. PDE5I PRN was measured by change in IIEF-EF domain score, percentage of “yes” responses to SEP2 and SEP3, and change in IIEF Intercourse Satisfaction (IS) and Overall Satisfaction (OS) domains from end of the 4-wk PDE5I PRN lead-in period to the end of the 12-wk double-blind treatment period.

Results: A total of 590 men completed the study. All comparisons of TAD OAD ($n=391$) to placebo ($n=199$) were statistically and clinically significant (data not shown). Outcomes for TAD OAD vs. PDE5I PRN were comparable (see Table below).

Conclusions: TAD OAD provided comparable efficacy and is a viable option for men seeking an alternative to PDE5I PRN ED therapy.

Measure	PDE5I PRN	Tadalafil OAD	LS mean change (P-value) ^a
IIEF-EF	21.5	22.1	0.6 (0.116)
SEP2	86.8	82.4	-4.8 (0.003)
SEP3	72.1	68.3	-4.4 (0.016)
IS	10.3	10.0	-0.3 (0.018)
OS	7.2	7.3	0.2 (0.187)

^aWithin group p-value is from t-test of the least squares (LS) mean change [difference between 12-wk OAD endpoint (last observation carried forward) and 4-wk PRN period].

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AN INVESTIGATION ON CURRENT STATUS AND PUBLIC AWARENESS FOR COUNTERFEIT PHOSPHODIESTERASE TYPE 5 INHIBITORS IN KOREA

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Introduction: This survey was undertaken to capture awareness status for counterfeit phosphodiesterase type 5 inhibitors (PDE5I) in general population, and experience of seeing patients taking counterfeit PDE5I in practicing urologists.

Material & Methods: Randomly selected male from general population, to represent nationwide distribution, were surveyed by computer-aided telephone interview, and 141 urologists surveyed by e-mail with structured questionnaire.

Results: Of 450 eligible responses, a 75% had experience of contact with counterfeit PDE5I via the illegal internet markets (41.1%), friends (24.6%) and text messages. Most common reasons for taking counterfeit PDE5I were easy accessibility (31%), sexual curiosity (23%), low price (19%) and inconvenience for visiting doctors (13%). A 71.5% of responders were not fully aware of harmful effects of counterfeit PDE5I. These responders obtained warning information of counterfeit risks mainly through newspapers, broadcastings and web sites. Half of the respondents did not recognize that illegal drugs are mostly counterfeit PDE5I. Only a 15% of respondents reported that morphological inspection was important to differentiate the original PDE5I from counterfeit drug. A 38% of urologists had experience of seeing patients with side effects of counterfeit PDE5I, mostly in fifties (55%) and forties (22%). Most side effects were palpitation, headache and hot flushing; however, serious side effects such as priapism, blue vision and cardiac arrhythmia were also noted.

Conclusion: Counterfeit PDE5I are still prevalent in Korea despite strict regulations for illegal medicine. Systematic and continued approach by government and academy society is must to increase the public awareness of counterfeit PDE5I risk.

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ROLE OF NOCTURNAL PENILE TUMESCENCE AND RIGIDITY IN RESPONSE TO DAILY SILDENAFIL IN PATIENTS WITH ERECTILE DYSFUNCTION DUE TO PELVIC FRACTURE URETHRAL DISRUPTION: A SINGLE-CENTER EXPERIENCE

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Purpose: Erectile dysfunction (ED) is common in patients with pelvic fracture urethral disruption (PFUD). ED in these patients is almost organic and in some patients, the disease is refractory to phosphodiesterase type 5 (PDE-5) inhibitors. The selection of optimal therapy is important. The causes of ED have been used as a referred parameter to select therapy; however, the cause may be indefinite. In this retrospective study, we aimed to find an optimal variable to guide therapy choice.

Materials and methods: We included 38 patients with ED due to PFUD who were evaluated subjectively and objectively by the International Index of Erectile Function 5 (IIEF-5), Nocturnal Penile Tumescence and Rigidity (NPTR) test and penile Doppler ultrasonography. All patients received a daily dose of sildenafil 50mg for 12 weeks. Assessments were made before and after treatment of daily sildenafil. Response to sildenafil treatment was defined as sustained erectile allowing vaginal penetration and intercourse.

Results: 31 patients received daily sildenafil 50mg for 3 months and were followed up: 54.8% showed response to sildenafil defined as reporting successful vaginal penetration and intercourse. Patients with neurogenic, arterial and venous ED did not differ in efficiency rates ($P=0.587$). However, the penile erectile rigidity recorded by NPTR test affected efficiency significantly ($P=0.046$). Patients with tip rigidity $>40\%$ had the highest response rate (76.9%), but the response rate for patients with tip rigidity $<20\%$ was only 22.2%.

Conclusion: NPTR recording can reveal resident erectile function in patients with ED due to trauma and is significant for selecting pharmacological treatment as optimal therapy.

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EFFECTS OF DEODORANT AND ANTIPERSPIRANT USE AND THE ABSENCE OF HAIR ON THE ABSORPTION OF TESTOSTERONE 2% SOLUTION APPLIED TO THE AXILLAE

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Introduction: Testosterone 2% solution is applied to the axillae and is indicated for testosterone replacement therapy in males deficient in endogenous testosterone. This open-label cross-over study evaluated the effect of deodorant/antiperspirant use and the absence of axillary hair on the absorption of testosterone solution. **Patients and Methods:** Healthy males ($N=30$; ≥ 50 years with baseline testosterone <400 ng/dL) were randomized to 1 of 4 treatment sequences involving 6 treatments. Each treatment was comprised of a single application of testosterone 2% solution (30 mg/1.5 mL) to each underarm. Axillae were unshaved or shaved, and were untreated or treated with deodorant/antiperspirants before testosterone application. Each dose was followed by 72 hours of blood sampling for measurement of serum testosterone concentrations.

Results: Profiles of mean testosterone concentrations were similar

for each treatment. Median t_{max} occurred about 1 hour postdose for all treatments. Mean AUC(0–24), AUC(0–72), and C_{max} were similar across treatments (all p -values >0.05) except for 15% lower C_{max} when the dose was applied after deodorant/antiperspirant to shaved axillae compared with unshaved axillae (LS mean, 531 vs. 626 ng/dL, respectively; $p=0.011$). This difference is not considered clinically significant. The 95% CIs generally fell within the traditional bioequivalence limits of 0.8 to 1.25 for AUC(0–72), AUC(0–24), and C_{max} . Incidence of treatment-emergent adverse events (TEAEs) was low ($<15\%$) in each treatment arm, and most TEAEs were mild.

Conclusion: The absorption of testosterone 2% solution was generally not affected by the use of deodorant/antiperspirant or by the absence of axillary hair. Testosterone solution was well tolerated.

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CHANGE IN SEXUAL FUNCTION IN MEN WITH LUTS/BPH ASSOCIATED WITH LONG-TERM TREATMENT WITH DOXAZOSIN, FINASTERIDE, AND COMBINED THERAPY

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Objective: Comprehensive assessment of sexual function (SF) in men with LUTS treated long-term with drugs using validated instruments is lacking thus we examined the effects of doxazosin, finasteride and combined therapy on SF assessed by the Brief Male Sexual Function Inventory (BMSFI) using the MTOPS data.

Results: 2,783 men completed the BMSFI at baseline and at least once during follow-up. Overall, men's sexual health declined over the study period. Men taking 5ARIs experienced significant worsening of ejaculatory function compared with placebo. Men assigned to combined therapy also experienced significant worsening in erectile function and sexual problem assessment. In contrast, there was no significant difference in changes in any of the BMSFI domains when men assigned to doxazosin were compared to those on placebo. Libido changes were not different between groups.

Conclusions: Our results differ from most other reports of sexual function with LUTS treatment as all domains of function were serially measured prospectively and for the duration of observation. Treatment with doxazosin alone had minimal, if any, negative impact on sexual function in men with LUTS, while treatment with 5ARIs was associated with a worsening of several domains of sexual function. Physicians should discuss the possible long-term negative effects of drug treatment for LUTS on sexual function with their patients to better inform their decision-making on treatment.

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EFFICACY OF TADALAFIL ONCE DAILY IN MEN WITH ERECTILE DYSFUNCTION: AN INTEGRATED ANALYSIS OF DATA OBTAINED FROM 1,913 PATIENTS FROM 6 RANDOMIZED, DOUBLE BLIND, PLACEBO CONTROLLED CLINICAL STUDIES

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Introduction: Once daily dosing of tadalafil (TAD) (2.5mg and 5mg) is approved for the treatment of erectile dysfunction (ED). Integrated analyses of data from clinical trials may help to better understand the effect of patient characteristics on treatment response.

Patients and Methods: This post-hoc analysis integrated data from 6 randomized, double blind, PBO-controlled clinical trials. We assessed the Erectile Function domain of the International Index of Erectile Function (IIEF-EF) after 12 weeks of treatment. Subgroups were defined based on age, obesity, tobacco use, alcohol consumption, diabetes, and cardiovascular disorders (CVDs) as recorded in the medical history. Least square (LS) means and 95% confidence intervals (CI) were estimated by analysis of covariance (ANCOVA) including terms for baseline, study, treatment, subgroup, and subgroup-by-treatment.

Results: This analysis included 1,913 men with ≥3 months history of ED assigned to PBO (N=596), TAD2.5mg (N=394), or TAD5mg (N=923) once daily. Mean age was 58 years (20.7–83.2); 25.7% were ≥65. Most had ED for ≥1 year; one third were obese (BMI ≥30), had diabetes, or had CVD.

LS mean difference to PBO for IIEF-EF (95% CI) in the overall population was 4.2(3.3–5.1)(p<0.001) for 2.5mg and 5.4(4.7–6.1) (p<0.001) for TAD5mg; in pts with BMI≥30 2.3(0.6–3.9)(p<0.01) and 4.7(3.4–6.0)(p<0.001), respectively. Smokers did not significantly improve with TAD2.5mg but did improve with TAD5mg. Both doses were effective in pts ≥65yrs, in pts reporting alcohol consumption and in pts with diabetes or CVD. No unexpected safety findings were observed.

Conclusions: Both TAD2.5mg and TAD5mg once daily for 12 weeks yielded statistically significant improvements of IIEF-EF in all sub-populations in this analysis except for tobacco users receiving TAD2.5mg.

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IMPROVEMENT IN PENILE CURVATURE AND PLAQUE VOLUME AFTER INTRALESIONAL VERAPAMIL THERAPY AS A FUNCTION OF PEYRONIE'S DISEASE SEVERITY

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Objective: Peyronie's disease (PD) affects 1–5% of men in the United States and can have a profound impact on sexual health and self-perception. The efficacy of Intralesional Verapamil Therapy (ILVT) for PD is unclear, but evidence suggests men using ILVT may have significant improvement in objective measures of

PD. We assess here the effects of ILVT in men with PD and identify risk factors that correlate with ILVT outcomes.

Methods: Sixty-three men with PD received a course of 6 ILVT injections over a 12-week period. Penile curvature and plaque volume were measured before and after treatment. Demographics included age, coronary artery disease, diabetes, hypertension, smoking history, painful traumatic event, free testosterone (T), total T, and time from symptom onset. Data were analyzed using logistic regression, Wilcoxon signed-rank test, and Spearman rank-order correlation.

Results: Median (interquartile range) patient age was 58 (53,62) years, penile curvature 45 (30,65) degrees, and plaque volume 252 (99,589)mm³. Significant decreases in penile curvature (post-ILVT 35 (25,48.5)degrees, p=0.011) and plaque volume (post-ILVT 221 (123,420)mm³, p=0.032) were observed. Negative correlations were observed between free T and change in penile curvature (Spearman's Rho(Rs)=−0.282, p=0.029), as well as time from symptom onset and change in plaque volume (Rs=−0.271, p=0.049). Larger initial penile curvature and plaque volume were correlated with greater improvement after a single ILVT course (Rs=0.552, p<0.001; Rs=0.693, p<0.001, respectively)

Conclusions: Men with PD may benefit from ILVT treatment. Men with greater initial penile curvature, larger plaque volume, lower free T, and shorter time from onset of symptoms had significant improvement.

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MODIFICATION OF THE INVANCE MALE SLING PROCEDURE: TREATMENT OF STRESS INCONTINENCE AFTER RADICAL PROSTATECTOMY

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Introduction: Incontinence is not uncommon after radical prostatectomy due to damage to the external urethral sphincter. In January 2009, the InVance male sling procedure underwent two modifications; releasing the central tendon and a relocation of the screws more medially on each pubic rami. The aim of this study is to determine how these modifications influence the outcome of surgery.

Methods: Patients were classified by date of surgery. Group A (n=25) had the unmodified sling procedure and group B (n=34) were operated with the modified sling. Post-operative outcomes were compared between groups using the International Continence Society Male Short Form (ICS-SF) and the Patient Global Impression of Improvement Scale (PGI-I), using a grading system where low scores indicate better results. Also, the Patient Satisfaction Scale (PSS) was used.

Results: Preoperatively 57 (97%) patients used ≥ 2 pads daily. After surgery 13 (52%) of patients in group A used ≤1 pad compared to 30 (88%) for group B (p<0.01). Also the ICS incontinence section showed that a higher proportion (p<0.05) of group B (79%) had a low score (<10/24) compared to group A (60%). Results of the PGI-I scale show that group B (68%) had a higher proportion (p<0.05) of positive response compared to group A (36%). Also, the PSS showed higher satisfaction (p<0.05) of patients in group B (76%) than in group A (44%).

Conclusion: The modified sling procedure suggested more promising results. In fact, there was a significant reduction in incontinence and improvement in the patients' satisfaction. In conclusion, the

modified sling procedure improved continence with few risks and no new adverse effects.

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NEUROPHYSIOLOGIC TESTING IN MEN COMPLAINING OF PENILE SEANTION LOSS AFTER FINASTERIDE USE FOR HAIR LOSS

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Introduction: Recently, there has been great interest in the concept that 5-ARI's are associated with persistent sexual side effects after their cessation. Penile sensation loss is a distressing problem for men leading to secondary sexual sequelae including difficulty obtaining an orgasm during sexual relations. Somatosensory evoked potential (SSEP) analysis is a standard methodology for assessment of sensory nerve function. This analysis was conducted to define penile dorsal nerve conduction velocities in men presenting with this condition.

Methods: The study population consisted of: (i) men presenting with complaint of penile sensation loss after commencement of 5-ARI (ii) presentation to clinic ≥3 months (m) after cessation of 5-ARI and (iii) at least 3 months of 5-ARI use and (iv) no prior neurological history. All patients underwent SSEP analysis of the penile dorsal and lower limb (peroneal, posterior tibial) nerves.

Results: 36 men, mean age 32i,±12 y complained of finasteride-associated penile sensation loss. 69% had concomitant ED, 28/32 had no vascular, neurological or endocrine comorbidity. 2 had hypertension, 1 dyslipidemia and 1 sleep apnea. Mean duration of finasteride use was 21i,±14 m. Mean duration since last dose of finasteride was 10i,±6 m. While 30/32 (87.5%) SSEP studies were normal, two (12.5%) were abnormal, one demonstrating dorsal nerve abnormalities alone, and the other both dorsal and lower limb nerve abnormalities suggesting a systemic neuropathy. The neurophysiologic changes included latency delay and amplitude reduction.

Conclusion: While the majority of men in this study complaining of penile sensation loss had normal neurological testing, two patients had abnormal studies raising the question as to whether finasteride may be implicated in neural pathway dysfunction.

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THE AROMATASE INHIBITOR (AI) ANASTRAZOLE (AZ) INCREASES THE DURATION OF THERAPEUTIC TESTOSTERONE (T) LEVELS AFTER TESTOSTERONE PELLET (TP) INSERTIONS: A RETROSPECTIVE LONGITUDINAL STUDY

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Introduction: T replacement with TPs is increasingly popular. TP insertion has a small risk of bleeding, infection, pain, and extrusion. AZ has been used off-label in men to treat hypogonadism (HG) and has been shown to be safe and effective in randomized clinical trials. AZ increases T levels by decreasing negative feedback of estrogen on the pituitary. We hypothesized that the use of AZ at the time of TP insertion would sustain therapeutic T levels and increase the interval between insertions.

Methods: Records of men who underwent TP or TP and AZ (TP AZ) treatment for HG from 2011–2012 were reviewed. Men were offered AZ in addition to TP to decrease the morbidity of multiple TP insertions. Hormone panels were obtained prior to T replacement and then at 6 weeks and 4 months from TP insertion. Patients with consecutive TP and then TPAZ treatments who had 2 lab measurements after each treatment were included. Demographics, TT, FSH, LH, and Estradiol levels were recorded. The log of TT was calculated and data were analyzed with linear regression and a student t test for time to reinsertion.

Results: 8 subjects were included. Demographics and hormone levels are shown in table 1. The TPAZ group maintained therapeutic TT levels longer, had a longer time to reinsertion, and less GT suppression (p<0.05, p<0.05, and p<0.001, respectively).

Conclusion: The addition of AZ to TPs prolonged therapeutic T levels and significantly increased the interval between TP insertions.

Table 1. Demographics and Hormone Levels in 8 HG Men Receiving TP Alone or in Combination with AZ			
Mean Age (SD)	57 (13)		
BMI (SD)	33 (4)		
Presenting Diagnosis	HG (6 Total)		
Hypogonadism	3 (38)		
Erectile Dysfunction	5 (62)		
Lab Values	Baseline	Post-Treatment Analysis	
Total T (ng/dL)	243 (90)	Higher in TPAZ (p=0.05)	
SHBG (ng/mL)	33 (13.7)	Lower in TPAZ (p=0.005)	
FSH (IU/mL)	6.2 (2.1)	Higher in TPAZ (p=0.003)*	
LH (IU/mL)	5.1 (2.4)	Higher in TPAZ (p=0.003)*	
Post Treatment Lab Draws and Time to TP Re-insertion			
Treatment Group	TP	TPAZ	p value
Days from TP insertion to lab draw			
Post-Re Lab 1	38 (13)	47 (13)	NS
Post-Re Lab 2	130 (25)	115 (15)	NS
Days to TP Re-insertion	137 (26)	223 (64)	p=0.05

*None of the FSH and LH levels in TPAZ group dropped below the "normal" lab threshold at 6 wks or 4 mo, whereas all of the patients in TP had values below normal at both time points.

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THE EFFECT OF CLOMIPHENE CITRATE ON INFERTILE MALES
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Introduction: Clomiphene citrate (CC) is a selective estrogen receptor modulator that increases gonadotropin production and may improve spermatogenesis. The purpose of the current study was to examine the effects of CC on hormonal levels and spermatogenesis in men treated for infertility.

Methods: Ninety men prescribed CC for infertility were retrospectively reviewed. Serum values for follicle stimulating hormone (FSH), luteinizing hormone (LH), total testosterone (TT), free testosterone (FT), sex hormone binding globulin (SHBG), estradiol (E) as well as complete semen analyses were collected before and after CC. Exclusion criteria included azoospermia and men treated with testosterone, human chorionic gonadotropin, or follitropin alfa during the previous 6 months.

Results: Forty-two men (46.7%) with a mean age of 35±1 years met the inclusion criteria for analysis. Serum hormone values significantly (p<0.01) increased for FSH (Δ3.07 mIU/L), LH (Δ243 mIU/L), TT (250.2 ng/dL), FT (5.23 ng/dL), SHBG (5.21 nmol/L) and E (1.93 ng/dL). Patients with a baseline FSH of ≤2 mIU/mL (n=5) had a no change in semen density (Δ-13.1±14.3 million/mL) or

total motile count (TMC, $\Delta -20.6 \pm 20.4$ million). Men with an initial FSH >2 (n=32) had a mean change in density of $+1.67 \pm 1.55$ million/mL and a significant improvement in TMC ($\Delta +3.4 \pm 2.9$ million, $p=0.03$). There were no significant differences between the serum hormone levels in men with baseline FSH levels of ≤ 2 or >2 mIU/L. Conclusion: Infertile men exhibit significant increases in serum hormone levels with CC. Those with FSH >2 mIU/mL had significantly improved semen density and TMC relative to men with FSH ≤ 2 mIU/mL. Measuring FSH prior to initiating CC therapy may be a useful predictor of improvement in semen parameters.

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THE MINIMALLY INVASIVE, NO-TOUCH ("MINT") TECHNIQUE FOR PENILE IMPLANT SURGERY

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Introduction: The minimally invasive infrapubic inflatable penile implant procedure was developed by Dr. Perito with the aim of minimizing operative time and post-operative morbidity (Perito, J Sex Med 2008; 5: 27–30). Dr Eid has also demonstrated a significant reduction in post-operative infections with his No-Touch technique (Eid et al. Urology 2012; 79: 1310–5). Using the principles and advantages of both of these procedures, we have developed a number of modifications that have been combined into a new technique.

Patients and Methods: The principles of the MINT technique involve an infrapubic approach combined with a no-touch technique facilitated by using 2 standard surgical drapes (1 x clear non-adhesive drape and 1x loban® drape) and an Alexis® wound retractor. We present our results for our first 50 patients undergoing primary prosthesis implantation. Patients with complex surgery necessitating >1 incision were excluded.

Results: Average age was 59.8 (± 11.3) years. Patients had one or more of the following etiologies for erectile dysfunction: vascular disease (n=22), post-radical prostatectomy (n=16), diabetes (n=8), Peyronies disease (n=8), venous leak (n=4) and priapism fibrosis (n=1). 70% had used intracavernosal injections. Implant used: Coloplast Titan (n=47), American Medical Systems (LGX; n =2), (CX; n =1). The average cylinder and rear tip extender length was 18.7 (± 1.6) and 0.9 (± 0.8) cms respectively. 65% could cycle prosthesis by 4 weeks. All patients have been followed-up for at least 3 months. There have been no post-operative infections.

Conclusion: The MINT technique for penile implants is a safe and reproducible procedure with a zero short-term infection rate.

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OUTCOMES OF ABDOMINAL WALL RESERVOIR PLACEMENT IN INFLATABLE PENILE PROSTHESIS IMPLANTATION: A SAFE AND EFFICACIOUS ALTERNATIVE TO THE SPACE OF RETZIUS

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Introduction: Traditional placement of the reservoir in the retropubic space of Retzius is associated with the rare occurrence of bladder, bowel and vascular injury. An alternative site, posterior to the

abdominal wall musculature, has been identified as a potentially safer location for reservoir placement.

Materials and Methods: We retrospectively reviewed a consecutive series of men who underwent virgin Coloplast Titan IPP surgery over a 10-year period. The reservoir was placed anterior to transversalis fascia (ATF) if they had a history of significant pelvic surgery; otherwise the reservoirs were located posterior to transversalis fascia (PTF).

Results: A total of 2,687 men met criteria for study inclusion. Of 2,239 with PTF placement, 0 had revision for palpable reservoir, 2 had bladder injury during initial dilation of the abdominal space, and 2 had post-operative inguinal reservoir herniation. Of 447 with ATF placement, 2 had post-operative auto-inflation, 6 had post-operative reservoir herniation into the inguinal canal, and 2 had palpable reservoir requiring revision surgery. No men in either group experienced bowel or major vascular injury and there was no statistically significant difference in infection rate between PTF and ATF groups (0.94% and 1.34%, respectively).

Conclusion: Abdominal wall reservoir placement is a safe and simple surgical method that can be recommended for IPP surgery. Men with pelvic surgery history can have the reservoir placed between the rectus abdominis musculature and transversalis fascia, while other men can have the reservoir placed between transversalis fascia and peritoneum in order to avoid a palpable reservoir. By applying this protocol, catastrophic injuries that may occur with conventional reservoir placement techniques can be avoided.

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INFLATABLE PENILE PROSTHESIS IMPLANTATION IN MEN UNDER 30: LONG-TERM OUTCOMES REGARDING PATIENT SATISFACTION

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Introduction: Although refractory erectile dysfunction is most common in older men, there exists a population of young men with conditions that cause significant ED. Vasoactive medications and microarterial bypass surgery are the primary treatments for this small cohort. Implantation of an inflatable penile prosthesis is a valuable and definitive treatment option, but there is a dearth of information regarding long-term outcomes in young patients. This study reports long-term outcome data using validated instruments and a non-validated questionnaire in a sample of men younger than 30 years old who underwent IPP implantation.

Patients: This is a single-institution, retrospective IRB-approved study of 23 men under 30 who underwent IPP implantation between 2005 and 2013. All patients had failed conservative management with PDE-5 inhibitors and intercavernosal injection therapy. All patients underwent extensive hemodynamic testing with Duplex Doppler Ultrasound and Dynamic Infusion Cavernosometry and Cavernosography and had results consistent with either severe corporo-occlusive or veno-occlusive erectile dysfunction.

Methods, Results: Between 2005 and 2013, 23 patients under 30 underwent IPP implantation. Average patient age was 24.6, ranging from 18 to 29 years old. After surgery, SHIM scores showed statistically significant improvement when compared to scores from before surgery. Satisfaction scores by modified EDITS assessment were high. Additionally, the non-validated questionnaire documented high satisfaction rates in this sample. Most patients reported that they would undergo the procedure

again and that they would recommend it to other patients.

Conclusion: PP implantation is a valuable option for young men under 30 who desire definitive management for erectile dysfunction. Data on young patients with severe ED are limited, but validated instruments and a non-validated questionnaire in this sample show that young men who undergo IPP implantation report high satisfaction after the procedure.

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MEASURES TO IMPROVE INFECTION CONTROL IN PROSTHETICS SURGERY

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Introduction: Infections of inflatable penile prosthesis (IPP) are catastrophic events, often requiring device explantation. Infection rates for experienced prosthetics surgeons range from 3-20% depending on patient risk factors.

Material and Methods: We retrospectively reviewed cases of penile prosthesis placement by a single surgeon at a tertiary care center. After identifying an infection rate of 6%, twice the average rate, a multidisciplinary plan for infection control was implemented. Measures included (1) rearrangement of case scheduling, (2) detailed preoperative patient education, (3) institution-specific preoperative antibiotics, (4) optimal antibiotic infusion timing, (5) minimized intraoperative traffic, (6) gentle patient shaving, (7) double chlorhexidine preparation, (8) use of antimicrobial draping, (9) scheduled glove changes, (10) changes in technique to minimize contact with the scrotum, and (11) use of antibiotic-soaked towels when handling the prosthesis.

Results: Following the implementation of these measures, we reviewed our rates of infection and reoperation. From March 2012 to June 2013, 100 IPPs were performed with one reoperation and no documented infections.

Conclusions: Infection control in prosthetics surgery is critical component to the surgical process and can be devastating if not appropriately addressed. We present a checklist of infection control measures that have been successfully implemented to reduce infection risk. These measures should be considered by all prosthetics surgeons and are critical for those with an infection rate higher than the reported average.

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IATROGENIC URETHRAL INJURY DURING PLACEMENT OF PENILE PROSTHESIS, IS IT TRULY AN INDICATION TO ABORT?

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Objective: Urethral injury during penile prosthesis (PP) surgery has traditionally been an indication to abort, secondary to infection risk. We previously reported a case of primary urethral repair with safe placement of PP. This represents an updated series of iatrogenic urethral injuries and concurrent PP placement.

Materials and Methods: A retrospective review identified 3 cases of urethral injuries at time of PP placement with primary repair and concurrent placement of PP. One occurred during a "virgin" placement, the other two during revision surgery. The

size and location of the injuries included 2cm anterior, 2cm lateral, and 1cm lateral. Two occurred during dissection with the cautery and one during lysis of scar tissue with lateral retraction. The pre-placed urethral catheter was visualized in all cases, confirming the injuries. After urethral repair, cystoscopy was performed to confirm the watertight closure and a new catheter was placed. Copious irrigation was used prior to bringing the new PP to the surgical field and the surgeries were then completed in standard fashion.

Results: The injuries were identified immediately and repaired in two layers with running monofilament suture. The catheters were removed after normal retrograde urethrogram performed 2 weeks post-operatively. To date, all of the patients healed without evidence of urinary leak or prosthetic infection.

Conclusion: With negative cultures and injuries occurring prior to corporotomy, it was felt that there was low additional risk and in the patients' best interest to proceed. We challenge the notion that urethral injuries always require aborting PP placement. In select cases, proceeding with the PP placement may be cautiously considered an option with immediate urethral repair.

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INITIAL TWO YEAR EXPERIENCE WITH HIGH SUBMUSCULAR PLACEMENT OF INFLATABLE PENILE PROSTHESIS RESERVOIRS

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Objective: High submuscular (HSM) placement of inflatable penile prosthesis (IPP) reservoirs has become standard practice at our institution. We present clinical and patient satisfaction data of a large consecutive series of patients who underwent HSM placement of IPP reservoirs.

Methods: Patients who underwent IPP placement between 2011 and 2013 were reviewed. All patients underwent insertion of either the AMS 700 CX/LGX or Coloplast Titan CL implant through a transscrotal incision. Patient and reservoir palpability were prospectively evaluated by self-assessment and surgeon examination. Statistical analysis examining clinical and morphometric factors of patient responses was performed.

Results: Of the first 99 patients who underwent HSM placement of the reservoir, survey and follow-up data was available for 76. Mean reservoir volume (58±17 cc) for patients undergoing placement of the Coloplast Titan CL and the AMS 700 CX/LGX was 68cc and 55cc, respectively (p=0.002). A majority (64/76, 84.2%) of reservoirs were not palpable by patients and 72/76 (94.7%) reported overall satisfaction with their IPP. Similarly, reservoirs were palpable by surgeon physical examination in only 5/76 (6.6%) of cases. Only 2/76 (2.6%) reported bothersome symptoms related to the reservoir. We had 2/99 (2%) reservoir-associated revisions early in our experience. Patient BMI, reservoir manufacturer, and filled volume had no relationship to patient satisfaction or device palpability.

Conclusions: Men undergoing HSM placement of IPP demonstrate high satisfaction rates comparable to previously published series of IPPs with traditional reservoir placement.

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ECTOPIC RESERVOIR PLACEMENT DOES NOT INCREASE RISK OF IPP COMPLICATIONS

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Intro: We report complications comparing standard reservoir placement (SRP) to ectopic reservoir placement (ERP) in our cohort of inflatable penile implants (IPPs).

Methods: A retrospective review was performed of primary IPPs placed by a single surgeon (TSK) from 2010 to present with at least 6 months of follow-up. All cases utilized a compressive scrotal dressing and closed suction drain. ERP was used when the fascia could not be bluntly pierced with a finger or if the peritoneum had been violated during a previous surgery. For ERP, we place a long ring clamp into the inguinal ring but pierce through the posterior wall of the external oblique toward the ipsilateral shoulder and the reservoir is placed into this space (above the fascia but below the muscle). For the ERP, 60% were Coloplast (under-filled 125mL cloverleaf) and 40% AMS (Conceal).

Results: Out of 146 primary IPPs, 29 had ERP (20%). There were four reservoir specific complications. One ERP (Conceal) required revision after the tubing inexplicably ripped and twisted on itself. One ERP (Conceal) migrated into the scrotum and required surgical revision (the reservoir was possibly placed too far laterally). Two patients with SRP migrated (1 AMS & 1 Coloplast) leaving them with a low inguinal bulge. In both cases the patients had transient pain that resolved within 6 weeks. Surgical drain output data (n=92) showed no difference ERP (86mL with 33% >100mL) and SRP (88mL with 33% >100mL). 3 infections (2 SRP, 1 ERP) occurred in the cohort (all diabetics). 2 non-operative delayed hematomas occurred (1 SRP, 1 ERP). 2 AMS SRP required replacement as they were intact but not compressible (1 SRP, 1 ERP). All ERP were well tolerated.

Conclusions: Compared to SRP, ERP appears to have no increased risk of migration, drainage, hematoma, or infection.

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INCREASE IN AVERAGE AGE OF INFLATABLE PENILE PROTHESIS RECIPIENTS OVER THE PAST 13 YEARS

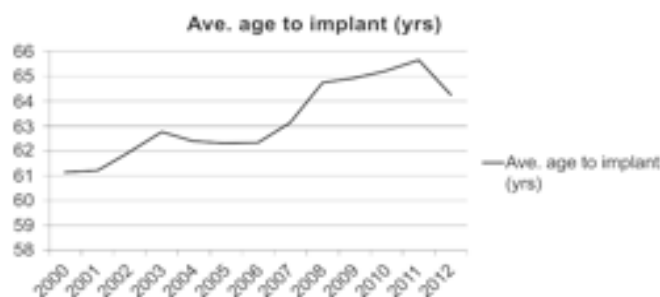
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Introduction: Recent literature suggests that, despite a historical reluctance of many surgeons to perform inflatable penile prosthesis (IPP) surgery on older men, men aged > 75 who undergo IPP do not have statistically significant differences in device survival or satisfaction rates compared with men aged < 75 years (Chung E et al. World J Urol 2013; epub ahead of print). We sought to evaluate trends related to patient age at time of surgery.

Materials and Methods: We reviewed 47,182 reports of Mentor Alpha 1 and Titan (Coloplast Corp., Minneapolis, MN) IPP surgeries sent to a post-market registry between January 2000 and December 2012.

Results: The average patient age at time of IPP surgery increased over time from 61.13 years in 2000 to 64.24 years in 2012. The average age increased from one year to the next in 8 of the 12

years studied. The minimum and maximum ages of any patient implanted (20 and 90 years, respectively, in 2000 and 23 and 92 years, respectively, in 2012) did not exhibit any meaningful trends over the study period.



Conclusion: The average age of IPP recipients has been steadily increasing. This trend may reflect an increased recognition that patient motivation and health, rather than chronological age, should be the optimal drivers of the decision for implant surgery.

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THE CARRION CAST: AN INTRACORPORAL ANTIMICROBIAL SPACER MADE OF CaSO₄ USED TO BRIDGE THE GAP BETWEEN EXPLANATION OF INFECTED PENILE PROSTHESIS AND DELAYED REIMPLANTATION

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Introduction: Surgical treatment of infected penile prosthesis (PP) entails timely salvage of the implant. Immediate salvage prevents corporal space fibrosis, however carries a significant infection risk. Delayed implantation reduces the infection risk, but the ensuing penile fibrosis can obliterate tissue architecture. We present an update to the use of a temporary antimicrobial-doped synthetic high purity Calcium Sulfate (SHPCaSO₄) cast that acts as both a "spacer" & localized emitter of antimicrobials.

Materials & Methods: 4 patients with complex medical/surgical histories presented with infected PP that were not amenable to immediate salvage & were treated with the CaSO₄ cast. All presented with purulent drainage & symptoms suggestive of bacteremia/septicemia. Per the proposed treatment, PP components were removed, wound was irrigated using a "Mulcahy salvage protocol", & SHPCaSO₄ mixed with antimicrobials was injected into the corporal space forming a cast.

Results: Eradication of infection was noted in all 4 patients. 2 patients with no evidence of intracorporal fibrosis or residual cast material underwent successful reimplantation at 6 weeks. 1 patient underwent placement of only one narrow right malleable implant at 15 weeks, due to contralateral fibrosis. Reimplantation result are pending for the remaining patient due to recent placement of cast.

Conclusions: We present an update to our initial experience demonstrating that the use of the "Carrion Cast" as an efficacious method of eradicating infection & minimizing fibrosis in patients who are not amenable to immediate salvage. Casts' maintenance of intracorporal volume post PP removal may account for ease of reimplantation. Literature suggests that the cast dissolves by 6 weeks. Further investigation is warranted.

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PERINEAL MINIMALLY INVASIVE TECHNIQUE FOR CYLINDER LENGTH ADJUSTMENT

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Introduction: Inaccurate cylinder size measurement may not always be noticed intra-operatively when inserting an inflatable penile prosthesis (IPP) resulting in under or oversizing. A novel technique to facilitate reliable and safe cylinder length adjustment with minimal morbidity is described along with patient outcomes.

Methods: For perineal repair, all patients 7 were positioned in dorsal lithotomy and prepped and draped using the prior described "no touch" technique. A midline incision into the perineum was made through which the right and left corpora cavernosa (CC) were exposed. A vertical incision was made into each CC until the rear tip of each cylinder was visualized. After placing stay sutures on either side of the corporotomy, the proximal tip of the cylinder was brought into the operative field. The appropriately sized rear tip extender (RTE) was added or removed. The cylinder was then repositioned into the CC and the corporotomies closed.

Results: From 2010 to 2013 there were no intraoperative complications with regards to the cylinders, pump, tubing, or reservoir. Mean length of follow-up was 24 months. Six (86%) patients had a mean cylinder length enhancement of 2.5cm. One (14%) patient had 1cm RTE's removed due to initial oversizing. There were zero infections, zero cylinder erosions and zero device malfunctions. All seven patients reported 100% satisfaction rates with regards to cylinder length adjustment.

Conclusions: This is a novel procedure designed to adjust, up or down, IPP cylinder length with minimal dissection. This approach results in little to no post-operative pain and swelling and in addition leaves the scrotal pump and reservoir undisturbed. By decreasing exposure of the implant and tubing to skin flora, this procedure decreases the risk of IPP infections.

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HIGH SUBMUSCULAR VERSUS SPACE OF RETZIUS PLACEMENT OF IPP RESERVOIRS: WHAT ARE SURGEONS SAYING?

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Objectives: Placement of reservoirs outside the traditional Space of Retzius (SOR) "ectopically" has been advised in difficult implantations since 2001. High submuscular (HSM) inflatable penile prosthesis (IPP) reservoir placement inserts the reservoir ectopically but much higher in the abdominal wall, and has proven to be both reliable and reproducible. We wondered how HSM compared with traditional method of SOR reservoir placement for experienced physicians.

Methods: We queried a nationwide group of urologists recently trained in HSM reservoir placement to assess their preferences and concerns compared to SOR placement. Using a Likert scale based survey, we compared HSM to traditional SOR placement with regard to ease of implementation, surgical preference, and patient safety.

Results: A total of 25 urologists from 8 states participated in this survey. Overall, surgeon responses indicate that HSM placement is safer ($p < 0.001$), easier to learn ($p = 0.003$) and teach ($p < 0.001$), and conveys lower risk to visceral ($p < 0.001$) and vascular ($p < 0.001$) structures. The vast majority (17/25, 68%) prefer HSM placement, while 4/25 (16%) are neutral, and 4/25 (16%) prefer SOR. High-volume implanters (>20 implants/year), also find the HSM technique safer ($p = 0.001$) with lower risks of visceral ($p = 0.002$) and vascular ($p < 0.001$) injuries, and 7/9 (78%) prefer this method.

Conclusion: Urologists newly trained in HSM placement of the IPP reservoir report that this technique is readily implemented, strongly preferred, and safer for patients.

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INFLATABLE PENILE PROSTHESIS TECHNIQUE AND OUTCOMES AFTER RADIAL FOREARM FREE FLAP NEOPHALLOPLASTY

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Introduction: The surgical technique of inflatable penile prosthesis (IPP) implantation after neophallus reconstruction has been only briefly described in the literature. The aim of this study was to describe the technical aspects and short term outcomes of IPP implantation after neophallus reconstruction at a single institution. Patients and Methods: Nine men with previously constructed radial forearm neophalli underwent IPP implantation. Median follow-up was 9.6 months (range 1.5–139.7). The records for these patients were retrospectively reviewed and outcomes recorded.

Results: Mean age was 23.6 (range 18–31) years, and mean time interval from neophalloplasty to IPP implantation was 22.1 months (range 3–48). In all cases, 3-piece IPPs were employed, with 8/9 patients having 1 cylinder implanted in the native corporal body and extending into the neophallus. Mean surgical time was 222 minutes (range 142–409). Median length of implanted device was 22cm. No intra-operative complications were observed. At most recent follow-up, 6 patients (66.7%) had functional devices, with acceptable surgical outcomes. 3 patients (33.3%) sustained device infections, and 3 (33.3%) sustained cylinder erosion. In three patients in whom neo-tunica albuginea were fashioned by ensheathing the cylinder with allograft human dermal tissue matrix, no erosions occurred.

Conclusion: IPP insertion affords the best opportunity for functionality for patients with a radial forearm free flap neophallus. Extreme caution must be taken to ensure viability of the neophallus intra-operatively, and protocols to minimize the risk of infection should be followed. Fashioning neo-tunica albuginea using graft material may reduce risk of erosion.

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EXTERNAL TRACTION THERAPY FOR PENILE LENGTH RECOVERY PRIOR TO PROSTHESIS REPLACEMENT- A PROOF OF CONCEPT STUDY

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Introduction: Loss of penile length after penile prosthesis implantation is a common complaint. Previously, we reported a series of patients in which external traction therapy prior to penile prosthesis placement increased penile length prior to initial prosthesis placement in men who had a shortened penis. However, there is no reliable recognized technique to gain length prior to replacing an existing prosthesis in men who desire a longer penis. **Patients and Methods:** Three men with a history of erectile dysfunction and mechanical failure of a previously placed penile prosthesis also complained of a shortened penis after initial prosthesis placement. External penile traction was recommended for >3 hours per day for at least 3 months prior to prosthesis revision surgery.

Results: All three men completed the protocol. Daily average device use was 3 hours (range 2–6 hrs). Average duration of traction therapy was 7 months (range 4–13 months). Average stretched penile length (SPL) from pubis to corona increased by 1.83cm (range 1cm–3cm) after external traction therapy. After prosthesis replacement, all of the men had measured and perceived erect length gain. There were no adverse events.

Conclusions: External traction therapy can safely be used to enhance penile length in men who feel they lost length as a result of prosthesis placement and are willing to use traction to gain length prior to replacing their existing device. Patients must be counselled on the importance of compliance with a daily traction protocol. Ideal candidates must have space distal to the cylinder tips to apply the traction device to avoid pressure on the cylinder and reduce the risk of erosion or local tissue injury.

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HIGH PATIENT SATISFACTION OF INFLATABLE PENILE PROSTHESIS WITH SYNCHRONOUS PPLICATION FOR CORRECTION OF PEYRONIE'S DISEASE WITH ERECTILE DYSFUNCTION

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Objectives: We present clinical and patient reported outcomes of inflatable penile prosthesis (IPP) placement with synchronous penile plication (PP) for correction of Peyronie's disease and erectile dysfunction.

Methods: Patients receiving IPP placement with synchronous PP were reviewed. After induction of an artificial erection through saline intracorporal injection, PP was performed through a penoscrotal incision retracted distally along the penile shaft as needed for correction. After verification of adequate correction by a second saline injection, IPP placement was then conducted through the same penoscrotal incision. A qualitative survey assessing penile curvature, adequacy for intercourse and overall patient satisfaction after surgery was administered.

Results: 18 patients (11 dorsal curvature; 2 lateral; 5 biplanar) with a mean age of 62.6 yrs underwent IPP with synchronous PP from 2010 to 2013. Mean pre-op curvature (39 degrees)

was corrected to <5 degrees after PP in all cases. A median of 4 sutures (range 3–6) were used for PP with each suture providing a mean correction of 8 degrees. No patient suffered postoperative complications and all patients were discharged home on post-op day one. At an average 10.8 months of follow-up, 13/14 (93%) of patients reported no residual curvature, erections adequate for sexual intercourse and an improved overall condition. One patient (7%) who underwent a complex biplanar repair reported minor residual curvature. No patient reported continued pain or required release of plication sutures.

Conclusion: IPP placement with synchronous PP is a reliable option for correction of erectile dysfunction and Peyronie's disease.

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CORPOROTOMY PLUG TECHNIQUE IN THE MANAGEMENT OF PROXIMAL CORPORAL PERFORATION DURING REVISION PENILE PROSTHESIS SURGERY

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Here we discuss the corporotomy plug technique during difficult revision penile prosthesis surgery as a method to place the penile implant as an alternative to the suture sling technique for proximal lateral perforations. Our patient is a 42 year old man who underwent penile prosthesis surgery and developed erosion. The old implant was subsequently removed. After 6 months, the patient wished to proceed with revision surgery. During the revision surgery the scarred corpora made it difficult to find the correct space. Corporal dilation was performed with Metzenbaum scissors and a posterior lateral corporal perforation was encountered bilaterally. 6mm Hegar dilators were placed into the os of each perforated track occluding the false passage. We then proceeded in creating a new corporal tunnel using Metzenbaum scissors into the correct track. Brooks dilators and cavertomes were used to dilate these correct spaces. A 9.5 cm meallable implant was then placed. The corporotomy plug technique forgoes the need for a suture sling if a viable track can be found in the setting of proximal lateral perforation. It also eliminates the possibility of manipulation of the implant into the false passage, and prevents intubating the lip of the wrong corporotomy.

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EFFICACY OF PENILE TRACTION THERAPY AMONG PATIENTS UNDERGOING INTRALESIONAL INTERFERON TREATMENT FOR PEYRONIE'S DISEASE

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Peyronie's disease (PD) is a fibrosing condition, characterized by penile curvature, and is managed with oral, topical, intralesional, and surgical therapies. Currently, controversy exists regarding the role and efficacy of penile traction therapy (PTT) with intralesional injection (ILI) therapy for PD. We sought to evaluate the efficacy of PTT on PD variables among patients undergoing ILI with interferon alpha-2b (IFN).

A retrospective chart review of all patients undergoing ILI therapy during 2001–2012 was performed. Charts were reviewed for

demographic information, objective measures of penile curvature, and vascular status (via penile duplex Doppler ultrasonography). Statistical analyses were performed to compare outcomes of patients using PTT versus patients not using PTT. All patients underwent IFN therapy for PD.

127 patients underwent a median of 12 IFN injections (range 6–24). Mean age was 55 years (range 25–76), and mean pre-treatment curvature was 42.4° (SD 18.6°). 42 patients (34%) reported regular use of PTT (≥ 2 hrs traction/day) during the study period. PTT did not impact change in curvature (PTT 7.6° [SD 16.2°] vs. no PTT 9.6° [SD 12.0°], $p=0.48$) or penile length (PTT +0.04cm [SD 1.2] vs. no PTT +0.13cm [SD 0.8], $p=0.67$) and was associated with minimal decrease of end-diastolic velocity (PTT 2.0 cm/s [SD 5.9] vs no PTT 1.7 cm/s [SD 4.9], $p<0.01$). PTT did not correlate with patient age ($p=0.88$), pre-treatment erectile function ($p=0.53$), BMI ($p=0.58$), years with PD ($p=0.65$), pre-treatment curvature ($p=0.96$), or changes in peak systolic velocity ($p=0.18$) or resistive index (0.38).

From this data, routine use of PTT during ILI therapy for PD does not affect outcome of therapy related to improvements in penile curvature, length, or vascular status.

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TRENDS IN SURGICAL APPROACH OF PENILE PROTHESIS SURGERY OVER THE PAST 13 YEARS

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Introduction: Inflatable penile prosthesis (IPP) devices can be implanted using either a penoscrotal (PS) or infrapubic (IP) surgical approach. We sought to evaluate trends related to surgical approach utilized for IPP surgery over a recent 13 year period.

Materials and Methods: We reviewed 47,182 reports of Mentor Alpha 1 and Titan (Coloplast Corp., Minneapolis, MN) IPP surgeries sent to a post-market registry between 1/2000 and 12/2012.

Results: The proportion of IP surgeries decreased slightly each year from 33% in 2000 to a low of 22% in 2006. The proportion started to rise again in 2007 (24%) and has risen in 5 of the 6 subsequent years, reaching 39% of IPP surgeries in 2012. In accordance with the increase in IP approach cases, the alternative PS approach was used in 78% of cases in 2006 and declined to 61% of cases in 2012.

Conclusion: The IP approach to IPP declined in proportion to PS for 6 years until 2006; the trend has since reversed with a steadily increasing proportion of cases being performed with the IP approach.

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SHORTENED PENIS POST PENILE PROTHESIS IMPLANTATION TREATED WITH SUBCUTANEOUS SOFT SILICONE PENILE IMPLANT: CASE STUDY

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Introduction: Penile prosthesis surgery for erectile dysfunction has one of the highest satisfaction rates among all treatment options but is often associated with subjective and objective loss of penile length and girth following surgery.

Aims: To present a novel technique using a subcutaneous soft silicone implant for reversal of penile shortening and narrowing after prosthesis surgery, with additional gains in overall penile length and girth.

Methods: 9 patients who complained about significant decrease in penile length and girth following insertion of a penile prosthesis (malleable and inflatable) were treated with the insertion of a subcutaneous soft silicone penile implant. All patients (100%) had previously reported a loss in penile length (0.5–2 cm), and 7 of 9 patients (78%) also reported a loss in penile girth (0.5–2.6 cm) after penile prosthesis surgery.

Results: During a follow-up period of 4–24 months (11 ± 5.7 months), penile length and girth measurements showed a mean increase in length of 2.5 cm (± 0.7 cm) and a mean increase in girth of 3.4 cm (± 0.8 cm).

In a second group consisting of 3 patients with a follow-up period of only 2 weeks post surgery, penile length and girth measurements showed mean increases in flaccid length of 2.0 cm (± 0.8 cm) and in erect length of 2.3 cm (± 0.8 cm) and mean increases in flaccid girth of 2.7 cm (± 0.7 cm) and in erect girth of 3.5 cm (± 1.4 cm).

Conclusions: The additional insertion of the subcutaneous soft silicone implant in patients with decreased penile length and girth after penile prosthesis surgery is an effective treatment option that provides reversal of lost penile length and girth. Additional increases in penile length and girth over time have been observed. Further prospective studies are required to validate our initial experience.

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PATIENT SATISFACTION WITH TESTOSTERONE REPLACEMENT THERAPIES: THE REASONS BEHIND THE CHOICES.

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Introduction: Testosterone replacement therapy (TRT) for male hypogonadism is rapidly gaining popularity and acceptance. Options include gels, injections, and implantable subcutaneous pellets. Rates of patient satisfaction and the reasons for patient preference are currently unknown.

Materials/Methods: An anonymous, prospective survey was distributed to all men presenting for TRT at an academic urology clinic. The survey was organized into multiple domains including patient satisfaction and treatment motivation.

Results: Average patient age was 49 ± 0.7 years ($n=382$). Injectable testosterone was chosen by 53%, gel-based regimens by 31%, and pellets by 17%. Overall, 70% of patients were satisfied with their TRT and 14% reported dissatisfaction. Satisfaction rates were similar between gels (68%), injections (73%), and implantable pellets (70%). Doctor recommendation was the sole significant reason for patients preferring gel-based TRT (66% vs. 37% injection users vs. 31% pellet users). Injectable TRT was favored due to lower cost (35% vs. 21% gel users vs. 19% pellet users). Pellets were favored for ease of use (64% vs. 44% injection users vs. 43% gel users) and convenience (58% vs. 26% injection users vs. 19% gel users). TRT with gels and pellets were associated with increased rates of satisfaction over time. Improvements

in concentration and mood occurred at higher percentages in satisfied patients.

Conclusions: Patients on TRT are satisfied with various forms of therapy. Lower costs are important to patients on injections while convenience and ease of use are central in choosing pellet therapy. Men on TRT should be questioned about mood and concentration since these factors exhibited the greatest improvement in satisfied patients.

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FEMALE SEXUAL FUNCTION AND DEPRESSION DURING PREGNANCY – PRELIMINARY RESULTS

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Introduction: There is a high prevalence of female sexual function symptoms during pregnancy and these may be associated with depressive symptoms, in some cases. The aim of this survey was to evaluate the prevalence of sexual dysfunction symptoms and depression in pregnant women.

Patient and Methods: Cross-sectional study conducted between March 2012 and June 2013 at the antenatal clinic of a public Brazilian teaching hospital, with 142 healthy women after 14 weeks gestation. The Female Sexual Function Index (FSFI), a self-responsive questionnaire, was used to assess sexual function; women scoring ≤ 26 were classified as having sexual dysfunction symptoms. The Beck Depression Inventory (BDI) was used to assess depression; those scoring >21 were classified as having depression symptoms. Two samples Student's *t* and Fisher's exact tests were used to compare mean BDI scores and the prevalence of depressive symptoms in women with and without sexual dysfunction symptoms. $P < 0.05$ was considered significant. Results: A total of 85 women (56%) had sexual dysfunction symptoms. Women in this group had significantly higher mean total scores on the depression test than women without sexual dysfunction symptoms (14.2 ± 8.9 versus 8.5 ± 6.0 , respectively, $p=0.0001$). Depression (BDI scores > 21) was seven times higher in pregnant women with sexual dysfunction symptoms than women without sexual dysfunction symptoms (21% versus 3%, respectively, $p=0.001$).

Conclusion: There is a high prevalence of sexual dysfunction symptoms among healthy women in the second and third trimesters of pregnancy. Pregnant women with sexual dysfunction symptoms are significantly more likely to be depressed than those without these symptoms.

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EMBARRASSMENT AND ALTERED BODY IMAGE IN HYPOGONADAL MEN ON TESTOSTERONE REPLACEMENT THERAPY (TRT)

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Introduction: Despite the increased awareness and acceptance of hypogonadism and its treatment, stigma still exists surrounding TRT. We sought to determine whether men prescribed TRT were embarrassed and whether this was due to an altered perception of body image.

Materials/Methods: An anonymous, IRB-approved survey was distributed to all men presenting for TRT. The survey was organized into domains including patient embarrassment and body image. Statistical analysis was performed in GraphPad Prism with $p < 0.05$ considered significant.

Results: Of the 378 men surveyed, 21% ($n=79$) indicated embarrassment. Furthermore, 32% ($n=121$) felt they were judged for their use of TRT and 18% ($n=68$) reported a diminished sense of masculinity. Embarrassed patients were significantly younger (46 ± 1 vs. 50 ± 2 years) and more likely to have incomes $> \$100,000$ (63% vs. 50%). Factors that did not affect embarrassment included BMI, marital status, type and duration of TRT as well as reasons for starting TRT including low libido and erectile dysfunction. A lack of improvement in physical appearance had no relationship to embarrassment; however, testicular atrophy was significantly more common amongst embarrassed patients. Of the embarrassed cohort with testicular atrophy ($n=17$), the majority (71%) used TRT for >12 months with a higher proportion on injectables (70% vs. gels (12%) or pellets (18%)). In spite of these findings, 96.2% of all men stated they would recommend TRT to their friends.

Conclusions: A substantial number of men on TRT indicate that they feel embarrassed and that others are judging them. Patients with testicular atrophy are more likely to report a sense of altered body image. As such, use of HCG to maintain testicular volume may improve TRT satisfaction and body image.

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PREVALENCE OF SEXUAL OFFENDERS TREATED FOR ERECTILE DYSFUNCTION AT A SINGLE INSTITUTION: ETHICAL CONSIDERATIONS

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Introduction: The aim of this study was to determine the prevalence of sexual offenders in a cohort of patients treated for erectile dysfunction with intercavernosal injection (ICI) or inflatable penile prosthesis (IPP) in a tertiary referral center.

Patients/Methods: A retrospective chart review identified all patients treated with ICI in January 2012 through June 2013, and IPP from January 2004 through June 2013 at our institution. The National Sex Offender Public Website (NSOPW) database was cross-referenced with these patients.

Results: The ICI group ($n=609$) included 2 offenders, Level 3 and Level 2, while the IPP group ($n=602$) included 1 offender, Level 3. The sexual offenses varied from "assault with attempt to commit rape" to "rape and abuse of a child." Additionally, each patient was

convicted of multiple instances of sexual offense, occurring at a range of 9–25 years prior to treatment. Treatment was rendered without knowledge of these crimes.

Conclusions: Our findings confirm that there are sexual offenders receiving 2nd and 3rd line treatment for erectile dysfunction. Although the number of such patients is small, even in the setting of a large urban hospital, appropriate screening is advised.

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EFFICACY OF SUBCUTANEOUS BREMELANOTIDE SELF-ADMINISTERED AT HOME BY PREMENOPAUSAL WOMEN WITH FEMALE SEXUAL DYSFUNCTION: A PLACEBO-CONTROLLED DOSE-RANGING STUDY

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Introduction: Female sexual dysfunctions (FSDs) are distressing conditions for which there is no approved drug therapy. Bremelanotide is a novel cyclic melanocortin peptide that acts as a melanocortin–receptor–4 agonist. The study assessed the effect of self-administered bremelanotide in premenopausal women with FSDs.

Patients and Methods: Screened subjects with a diagnosis of hypoactive sexual desire disorder (HSDD), female sexual arousal disorder (FSAD), or both were given a single-blind, in-clinic placebo dose administered subcutaneously, followed by 4 weeks of placebo self-dosing. Subjects were then randomized to double-blind (DB) placebo or bremelanotide 0.75, 1.25, or 1.75 mg, comprising 2 in-clinic study–drug doses a week apart, followed by 12 weeks of at-home self-dosing as-needed. The primary endpoint was change from baseline in the number of satisfying sexual events (SSEs). The key secondary endpoints were changes in the Female Sexual Function Index (FSFI) and the Female Sexual Distress Scale–Desire/Arousal/Orgasm (FSDS–DAO).

Results: Of 1,142 screened subjects, 397 were randomized and 327 completed 1 month of DB study–drug use at home. Mean (SD) increase in SSEs was 0.2 (2.3) for placebo vs 0.7 (1.8) for 1.25 mg ($p=0.08$) and 0.8 (2.9) for 1.75 mg ($p=0.02$). Mean change in FSFI total score was 1.88 (5.92) for placebo vs 2.75 (5.70) for 1.25 mg ($p=0.03$) and 4.36 (5.58) for 1.75 mg ($p=0.002$). Mean change in FSDS–DAO total score was –6.8 (13.6) for placebo vs –9.2 (10.8) for 1.25 mg ($p=0.05$) and –13.1 (12.9) for 1.75 mg ($p=0.0005$). Improvement was observed in patients with HSDD or HSDD/FSAD. At all bremelanotide dosages, the most common adverse events were nausea, flushing, and headache.

Conclusions: In premenopausal women, bremelanotide is effective in both HSDD and mixed HSDD/FSAD populations.

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EXPLORING THE ROLE OF THE PARTNER IN COUPLES' SEXUAL RECOVERY AFTER SURGERY FOR PROSTATE CANCER

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Introduction: Partners' sexual function has been viewed as a factor in men's recovery of erectile function after prostatectomy. However, patients' and partners' perspective on the role of the partner in couples' sexual recovery has not been studied. The purpose of our study was to elucidate the role of the partner in the couple's sexual recovery from the patient's and the partner's point of view.

Materials and Method: Men and partners were recruited from a previous study and were interviewed separately about the role of the partner. Interview transcripts were analyzed using Grounded Theory with the help of NVivo software.

Results: 10 men and 9 partners (1 gay) participated approximately 18 months after surgery. Men were 62, partners 59 years old on average. Nine men had erectile dysfunction. 6 female partners were post-menopausal, the male partner had had a prostatectomy. Men and partners agreed that partners provide emotional and logistical support. Both also perceived the partner's own sexual interest, not function, as critical to the couple's sexual recovery. Some men felt pressured by it, feeling insecure due to erectile dysfunction. Men were unaware of partners' sexual needs or needs for support. Partners expressed those needs, but were unsure of what kind of support they needed.

Conclusions: The importance of partners' sexual concerns during couples' sexual recovery after prostatectomy should be acknowledged and addressed as a legitimate aspect of care for men recovering from prostatectomy.

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SEXUAL FUNCTION AND QUALITY OF LIFE OF BRAZILIAN PREGNANT WOMEN – PRELIMINARY RESULTS

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Introduction: Female sexual dysfunction symptoms are common in pregnancy and may also affect a woman's quality of life during this period. The aim of this survey was to evaluate the association between female sexual function symptoms and quality of life in a sample of Brazilian women in the second trimester of pregnancy. Patient and Methods: Cross-sectional study conducted between March 2013 and June 2013 at the antenatal clinic of a public teaching hospital, with 78 pregnant women, between 14 and 28 weeks' gestation. All participants were healthy at the time of the survey. The Female Sexual Function Index (FSFI), a self-responsive questionnaire, was used to assess sexual function; women scoring

≤ 26 were classified as having sexual dysfunction symptoms. The World Health Organization Quality of Life–Bref questionnaire was used to assess quality of life (QoL); final scores range from 0 to 100, with higher scores indicating better quality of life. The Chi-square and Student's *t* tests were used and $p < 0.05$ was considered significant.

Results: The main socio-demographic characteristics between the two groups (with and without sexual dysfunction symptoms) were similar. Participants were 29.4 ± 5.4 years of age (mean and standard deviation) and at 22 ± 4.4 weeks of gestational age at the time of the survey. A total of 43 women (55%) had sexual dysfunction symptoms. Women in this group had significantly lower QoL scores than women without sexual dysfunction symptoms (59.1 ± 11.2 versus 70.8 ± 11.8 , respectively, $p=0.0001$).

Conclusion: There is a high prevalence of sexual dysfunction symptoms in healthy women in the second trimester of pregnancy. These women are significantly more likely to have lower QoL scores than those without sexual dysfunction symptoms.

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IMPACT OF OVERWEIGHT ON THE SEXUAL FUNCTION OF PREGNANT WOMEN – PRELIMINARY RESULTS

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Introduction: Pregnancy in itself and being overweight may both affect female sexual function. Our aim was to evaluate and compare the sexual function of healthy normal and overweight pregnant women.

Patient and Methods: Cross-sectional study conducted between March 2012 and June 2013 at the antenatal clinic of a public teaching hospital, with 73 normal weight (pre-pregnancy BMI $18.5\text{--}24.9$ Kg/m²) and 79 overweight (BMI ≥ 25 Kg/m²) pregnant women. All participants were healthy at the time of the survey. The Female Sexual Function Index (FSFI) was used. Women scoring ≤ 26 were classified as having sexual dysfunction symptoms. The Chi-square and Student's *t* tests were used to compare categorical and continuous variables between the two groups. $P < 0.05$ was considered significant.

Results: Socio-demographic characteristics were similar for normal and overweight participants and mean gestational ages did not differ significantly at the time of the survey. The mean final FSFI scores did not differ significantly between the groups in the second trimester of pregnancy (22.1 ± 10.3 vs 21.1 ± 10.5 , for normal and overweight women, respectively, $p=0.555$), nor in the third trimester (21.1 ± 10.4 vs 19.3 ± 10.7 , $p=0.0293$). The prevalence of women with symptoms of sexual dysfunction (FSFI score ≤ 26) was higher in overweight compared to normal weight women, but the difference did not reach statistical significance ($48\% \times 63\%$, $p=0.072$). More women are being recruited.

Conclusion: According to our preliminary results, being overweight does not seem to affect the sexual function of women between 14 and 40 weeks of pregnancy, as measured by the FSFI questionnaire. This study was funded by a grant from FAPESP, Process n. 12/03670–4, 12/50225–6 and also from CNPq, Process n. 156234/2012–2.

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EFFICACY AND SAFETY OF PENILE GIRTH ENHANCEMENT BY TWO-STAGE AUTOLOGOUS FAT INJECTION (TAFI) OPERATION

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Introduction: To investigate the efficacy and safety of penile girth enhancement (PGE) by two-stage autologous fat injection (TAFI) operation in male patients with thin penises.

Materials and Methods: This study was conducted on 46 men with small penile circumference underwent TAFI operation from April 2009 to September 2010 and were followed up for 12 months. Patients in whom the mean thickness of the proximal 1/3 and of the distal 1/3 of the penis ($G1$) ≤ 7.4 cm were selected as subjects. TAFI operation consists of 2-stages. After thigh and/or abdominal fat suction, fat was evenly injected into the Colles' fascia (first stage). 3 months later, we thawed out the remnant frozen fat and reinjected (second stage). The OP time was analyzed. The $G1$, stretched ($L1$), and flaccid length ($L2$) were compared between before the surgery and 3, 6 and 12 months after the first stage surgery. IIEF-5 were compared between before the surgery and 3 and 12 months after the surgery. Postoperative complications were surveyed.

Results: The OP time was 41.7 (31–49) minutes at first and 17.5 (15–20) minutes at second stage. The injected fat volume was 39.4 (22–50) cc at first, 32.1 (20–42) cc at second stage. The preoperative, postoperative 3, 6 and 12 months $G1$ were 7.0 ± 0.4 , 9.3 ± 0.8 , 10.7 ± 0.9 and 10.7 ± 0.9 cm, respectively. The $L1$ and $L2$ were not significantly different between before the surgery and 3 and 12 months after the surgery. IIEF-5 was 19.6 ± 3.6 before the surgery, 20.3 ± 3.3 and 20.9 ± 3.5 at 3 and 12 months after the surgery ($P = 0.040$, 3 months; $P = 0.003$, 12 months; $P = 0.014$, 3 months vs 12 months). Only nodular fat was observed in two cases (4.3%) at 12 months after surgery.

Conclusion: TAFI operation for PGE in male patients with thin penises were effective and safe without postoperative major complications.

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HYPOACTIVE SEXUAL DESIRE DISORDER (HSDD) IN MEN: INTERVIEW CHARACTERISTICS AND CORRELATION WITH DESIRE SCALES IN HSDD POSITIVE AND NEGATIVE MALES

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HSDD is defined by DSM-IV-TR as persistently or recurrently deficient sexual fantasies and desire for sexual activities that causes distress and interpersonal difficulty. The HSDD is not better accounted for by another Axis I disorder and is not due exclusively to the direct physiological effects of a drug of abuse or a medication or a general medical condition. Epidemiologic studies indicate that a significant number of men in the general population complain of sexual desire difficulties and associated negative outcomes. For example, in the National Health and Social Life (NHSLS) survey, approximately 30% of men 18 to 59 years of age complained of a lack of sexual desire for several months or more within the past year. Lindau, et al (2007) in a similar survey, showed that 28% of men older than 56 complained of lack of interest in sex, two-thirds of whom were significantly bothered by their lack of desire, hallmarks of HSDD. These data indicate that problems of sexual desire are highly prevalent in men and that most have significant concern with their condition. No approved treatments are available for men. One of the impediments in the development of possible therapeutics is the absence of validated patient reported outcomes (PRO). Recently DeRogatis, et al (2012) reported on PROs specifically designed to assess components of HSDD in men (i.e., desire, distress) and found significant differences between HSDD positive and negative men. While these results provide some validation of the instruments, further validation was obtained by assessing the association between the coded themes from patient interviews and the diagnosis of HSDD. Results from this analysis support the components used in the PROs due to the significant differences between HSDD positive and negative patients.

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SUBSTANCE USE AND SEXUAL FUNCTION IN INFERTILE MALES: PREVALENCE AND CORRELATES OF DYSFUNCTION

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Introduction: This study sought to evaluate whether there was a correlation between alcohol and tobacco use with subjective parameters of sexual health and satisfaction. Few studies have looked at substance use among infertile men and their relationship to sexual satisfaction, and erectile function.

Materials and Methods: After IRB approval, we retrospectively reviewed 500 surveys completed by men who presented to an infertility clinic between 2003–2011 and evaluated their International Index of Erectile Function Domain scores with reported alcohol and tobacco use.

Results: Of the men surveyed, 16% were tobacco users and 72 % consumed alcohol. As compared to non smokers, men who smoked were more likely to feel that their erections were not hard enough for penetration, (8.2% v 2.8%, p=0.03), that it was more

difficult to maintain their erections to completion of intercourse, (8.3% v 2.6%, p=0.02) and they were more likely to feel unsatisfied with sexual intercourse (7% v 2%, p=0.02). As compared to men who drink alcohol, men who did not drink any alcohol were more likely to have low confidence in their erections (10.7% v 5%, p=0.03). Non-alcohol drinkers were more likely to report that their erections were not hard enough for penetration (7% v 2%, p=0.01) and that they would be unable to maintain erections after penetration (9% v 6%, p=0.0005). There was no difference in overall sexual satisfaction between men who drank alcohol and those that did not.

Conclusions: Sexual dysfunction and erectile dysfunction are more prevalent in infertile men who use tobacco and in infertile men who do not consume alcohol. Smoking status and alcohol use are correlative of men's assessment of their sexual and erectile function.

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DETERMINING SEXUAL AND URINARY FUNCTION AFTER ORGAN-SPARING SURGERY FOR PENILE CANCER USING VALIDATED QUESTIONNAIRES

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Introduction: Squamous cell carcinoma of the penis (PC) has traditionally been treated with partial penectomy with a 2-cm margin. More conservative resection margins have been reported to have no effect on oncologic control, but there is no consensus in the literature regarding functional outcomes after organ-preserving surgery for PC.

Patients and Methods: Six patients meeting inclusion criteria were retrospectively identified to have received organ-sparing surgery for PC at the Cleveland Clinic from 2003–12. The questionnaires employed were the IIEF and the Patient-Reported Outcome Measure for Urethral Stricture Surgery (PROM). Participants completed and returned by mail 37 questions evaluating sexual and urinary function.

Results: Two patients had undergone a glansectomy with glanuloplasty while 4 required a degree of distal corporectomy. Three patients (50%) report normal erections but describe intercourse as not very enjoyable and report being dissatisfied with their sex life. The remaining 50% consistently report no sexual activity and denied feeling sexual desire. All report only mild urinary symptoms, including decreased stream (18%) and feelings of incomplete voiding (67%). 83% of patients report their sexual symptoms do not interfere with their daily lives. 100% report being satisfied with their procedure.

Conclusions: Our study is the first to use standardized, validated questionnaires to evaluate sexual and urinary function in a North American penile cancer patient population. We report excellent overall urinary function and quality of life following penile-sparing surgery for PC, and our results depict more realistic sexual outcomes than those reported in studies using non-blinded and non-validated methods.

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EFFECTS OF TADALAFIL (TAD) TREATMENT ON ERECTILE FUNCTION (EF) RECOVERY POST BILATERAL NERVE-SPARING RADICAL PROSTATECTOMY (NSRP)

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Introduction: The rehabilitative impact of TAD following nsRP on penile function remains unclear. This multicenter, randomized, double-blind (DB), double-dummy, placebo (PLC)-controlled trial primarily assessed the proportion of patients (pts) achieving an IIEF-EF score ≥ 22 after 6 weeks (wk) washout. Secondary measures included IIEF-EF, Sexual Encounter Profile question 3 (SEP3) and penile length (PL).

Patients and Methods: Pts ≤ 68 yrs with adenocarcinoma of the prostate (Gleason ≤ 7) and normal preoperative EF were randomized post nsRP to either 9-month (mo) treatment with TAD 5mg once a day (OaD), TAD 20mg on demand (PRN), or PLC; followed by 6wk washout and 3mo open-label TAD OaD (OL, all pts). Logistic regression and ANCOVA adjusting for treatment, age and country were applied to IIEF-EF ≥ 22 , SEP3 and PL.

Results: 423 pts were randomized to TAD OaD (139), TAD PRN (143) and PLC (141). Mean(SD) age was 57.9(5.58) yrs. 20.9% of pts on TAD OaD, 16.9% on TAD PRN and 19.1% on PLC reached IIEF-EF ≥ 22 ; odds ratios for TAD OaD and TAD PRN vs PLC were 1.14 (95%CI 0.63–2.06; $p=0.675$) and 0.89 (0.48–1.65; $p=0.704$). During the DB-phase, SEP3 and IIEF-EF improved more in pts actively treated, where only TAD OaD vs PLC was significant (LSmean diff. of change in IIEF-EF 2.80; 95%CI 0.76–4.83; $p=0.007$). Both scores decreased during washout, but improved further during OL treatment. PL reduction after the DB-phase was significantly less vs PLC for TAD OaD only (LSmean diff. 4.20mm; 95%CI 0.47–7.93; $p=0.028$). There were no unexpected safety signals.

Conclusion: EF improvements gained during 9mo active TAD treatment were not retained after washout. However, TAD OaD given early after nsRP suggests advantages vs delayed treatment in responsiveness to treatment and in protecting from structural penile impairment post nsRP.

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ACCEPTANCE AND COMMITMENT THERAPY (ACT) FOR ADHERENCE TO AN ERECTILE REHABILITATION PROGRAM (ERP) AFTER RADICAL PROSTATECTOMY (RP)

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Introduction: Intracavernosal injection therapy (ICI) is the cornerstone of many erectile rehabilitation programs (ERP). However, compliance with ICI is historically low. This RCT tested a novel psychological intervention based on Acceptance and

Commitment Therapy (ACT) to help men overcome barriers to using ICI.

Methods: Men were recruited when starting an ERP and randomized to ERP+ACT or ERP+Enhanced Monitoring (EM). ERP+ACT received ERP plus 7 ACT Sessions. ERP+EM received ERP plus 7 calls from a nurse practitioner. Assessments were at entry, 4 months (m), and 8m. The primary outcomes were feasibility, number of penile injections/week (verified by syringe count), and compliance (≥ 2 injections/week). Secondary outcomes were: ED treatment satisfaction, sexual self-esteem, sexual bother, and prostate cancer treatment regret. 4m data is presented below, 8m will be available and presented at conference. If differences were not statistically significant, effect sizes (d) are reported (d=0.2, small effect; d=0.5, medium effect; d=0.8, large effect).

Results: 63 subjects were randomized (ACT n=32, EM n=31). The mean age was 60 \pm 7 years. The acceptance rate was 72%. At 4m, the ACT group utilized more injections/week vs. the EM group (1.73 vs. 0.95, $p<0.01$). Subjects in the ACT group were more compliant with ICI vs. the EM group (50% vs. 10%, $p=0.01$). The ACT group reported greater satisfaction with ED treatment (d=0.32), sexual self-esteem (d=0.30), and sexual confidence (d=0.47). The ACT group also reported lower sexual bother (d=1.08) and treatment regret (d=0.55).

Conclusion: Data suggest ACT is feasible, while increasing ICI use and compliance with an ERP. Data also indicate ACT increases sexual self-esteem, and reduces sexual bother and treatment regret.

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UROLOGIC TREATMENT OUTCOMES OF RECURRENT BLADDER NECK CONTRACTURE AND URETHRAL STRICTURES AFTER RADIATION FOR PROSTATE CANCER

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Purpose: Bladder neck contracture (BNC) and urethral stricture disease (USD) are known complications of radiotherapy and radical prostatectomy. Herein we sought to characterize patients who develop recurrent BNC or USD after radiation therapy and subsequent outcomes of Urologic interventions required for management.

Materials and Methods: Retrospective review of medical records was performed for patients between 2005 and 2011 who underwent urinary diversion, urethroplasty, artificial urinary sphincter (AUS) placement or urethral stent placement for complications of radiotherapy for treatment of prostate cancer. We identified 54 patients and analyzed demographics, type of radiation, prostatic surgical interventions including retropubic radical prostatectomy, robotic assisted laparoscopic prostatectomy or transurethral resection of prostate, antecedent treatment, presenting symptoms, diagnostic evaluation and subsequent interventions.

Results: Of the 54 patients identified, 23 underwent external beam radiotherapy (EBRT), 17 brachytherapy implants (BT) and 14 combination EBRT/BT. Of the 54 patients, 47% had a prior prostatic or salvage procedure. Patients required a total of over 365 procedures for stricture disease, averaging to 7.0 procedures per patient. Eleven percent of patients had bulbomembranous strictures, 26% prostatic strictures, 33% BNC and 30% a combination of the latter. Thirty five patients (65%) required an

AUS after treatment of their stricture disease with a 38% removal/revision rate. Thirteen endoluminal mesh stents were placed in 11 patients of which five required removal (38%). At last follow-up, American Urological Association Symptom Index (AUASI) decreased a mean of 7.6 and on average patients used 6.7 fewer pads per day. Remarkably, 37% of patients required subsequent urinary diversion.

Conclusions: Treatment of recurrent BNC and USD in the setting of radiation has received sparse attention in the literature.

Our data suggests that radiation induced pathology is an ongoing process that is difficult to treat and requires multiple interventions. The treatment quandary is that despite 37% of patients failing management and proceeding to urinary diversion, the majority of patients experienced substantial improvement in their urinary symptoms and continence. Treatment should be aimed at preserving the lower urinary tract, however individualized management and communication with patients is essential as some patients may prefer to forego the need for multiple operations and elect for early urinary diversion.

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DETERMINING THE EFFECTS OF RADICAL PROSTATECTOMY ON PENILE LENGTH BY COMPARING OBJECTIVE SURGICAL PARAMETERS OF 45,536 PATIENTS WHO UNDERWENT PENILE PROSTHESES INSERTIONS

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Objective: In current literature, the degree of penile length loss after prostatectomy is based on stretched penile length and patient self-reporting. A more objective measurement is used to evaluate length loss.

Methods: A retrospective review of the AMS PIF Database was done to study the surgical parameters of patients who have undergone penile implants in US and Canada between 2002–2011. Patients with conditions known to affect penile lengths were excluded. Patients with prostatectomy, diabetes, vascular disease and organic erectile dysfunction (ED) were included.

Results: A total of 45,536 patients were included in the study, with 14,507 patients in the Prostatectomy Group and 31,029 patients in the Non-Prostatectomy group. The mean age of Prostatectomy patients is 64.0yrs and 62.4yrs in the Non-prostatectomy group ($p < 0.001$). The majority of patients in both groups had an AMS 700 inflatable penile prosthesis inserted (Prostatectomy 82.5%, Non-prostatectomy 76.9%) using a penoscrotal approach (Prostatectomy 69.4%, Non-prostatectomy 66.8%, $p = 0.185$). The mean total corporal measurement is 19.4 ± 2.2 cm in the Prostatectomy group and 19.7 ± 2.2 cm in the Non-prostatectomy group ($p < 0.001$). This 0.3cm difference is consistently seen in the mean total length of implant components used, which is 19.1 ± 2.3 cm in the Prostatectomy group and 19.4 ± 2.4 cm in the Non-prostatectomy group ($p < 0.001$).

Conclusion: Based on actual surgical measurements, the average penile length of post-prostatectomy patients who underwent a penile implant is 0.3cm shorter than non-prostatectomy patients. Although statistically significant, this degree of difference, which is attributed to radical prostatectomy, is unlikely to impact overall sexual function and in our opinion is not clinically significant.

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EVALUATION OF NOCTURNAL TUMESCENCE AND ITS RESPONSE TO NIGHTLY SILDENAFIL CITRATE DURING ACUTE RECOVERY FOLLOWING RADICAL PROSTATECTOMY: A RANDOMIZED, DOUBLE BLIND, PLACEBO-CONTROLLED STUDY

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Introduction: Sildenafil citrate has been found efficacious therapy for post-prostatectomy impotence. In this study, we evaluated patterns of erectile function recovery following radical prostatectomy, and their response to early, nightly therapy with Sildenafil citrate. This is our interim analysis of the 2 weeks and 3 months post-operative data.

Patients and Methods: 84 patients who underwent nerve sparing radical prostatectomy for localized prostate cancer were randomized to either receive a nightly 50mg Sildenafil or placebo, starting on the first post-operative day and continuing for one year. Their erectile function was evaluated with the International Index of Erectile Function Questionnaire (IIEF) and RigiScan™ prior to surgery, and post-operatively at 2 weeks, 3, 6, 9 and 12 months.

Results: Pre-operatively, all patients had normal erections documented with pre-operative RigiScan™ defined as greater than 60% rigidity for at least 10 minutes. Following surgery, 16 (19%) and 19 (22.6%) of the 84 patients had normal erections at 2 weeks and 3 months, respectively. RigiScan™ and IIEF data demonstrated no statistical difference between placebo and Sildenafil groups (p -values at 3 months: 0.2769 and 0.1614, respectively) and no pattern of recovery was identified.

Conclusions: Nocturnal tumescence observed at initial phases of recovery was not affected by nightly Sildenafil citrate. Our data suggests that erectile dysfunction ensues in the immediate peri-operative phase, during which the Sildenafil use is of minimal benefit. Our final analysis with 1-year data will further assess for any long-term benefit of rehabilitative PDE5 inhibitor therapy.

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NOCTURNAL PENILE TUMESCENCE PRESERVATION WITH NIGHTLY LOW-DOSE SILDENAFIL 6 WEEKS AFTER NERVE-SPARING RADICAL PROSTATECTOMY

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Introduction: Several pathophysiologies are postulated for postoperative erectile function rehabilitation. In previous prospective studies we showed nocturnal penile tumescence and rigidity (NPTR) in the acute phase during the first night after catheter removal in 93% of the patients after nerve-sparing radical prostatectomy (nsRP) and the improvement of erectile function by using daily low dose Sildenafil.

Materials and Methods: 18 sexual active patients were operated by nsRP. All patients completed an IIEF-5 questionnaire concerning erectile function preoperatively. 7–14 days after surgery the transurethral catheter was removed and an erectometer measurement of NPTR (Rigi-Scan®) was carried out on each patient at the following night. To maintain and support recovery of spontaneous erectile function 9 patients with preserved nocturnal erections detected during NPTR-recordings received sildenafil 25mg/d at night starting immediately one the day after catheter removal. A control of 9 patients underwent follow up without PDE-5-inhibitors. 6 weeks after nsRP a second NPTR-measurement was performed.

Results: In the group of daily 25mg sildenafil (group 1) 2–5 erections were recorded (mean 2.8 erections/night) during the first night after catheter removal. The control (group 2) showed 1–4 erections (mean 2.6 erections/night) within this acute phase after nsRP. 6 weeks after nsRP NPTR-recordings showed a decrease of nocturnal penile erections with only a slight decrease in group 1 (1–4 erections/night, mean 2.6 erections) compared to group 2 (0–2 erections/night, mean 0.9 erections/night) ($p < 0.05$).

Conclusion: Daily low dose sildenafil leads to significant improvement of the preservation of nocturnal penile tumescence 6 weeks after nsRP and seems to be supportive to the further organic rehabilitation.

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COUPLES' SEXUAL RECOVERY TRAJECTORY DURING THE FIRST TWO YEARS AFTER SURGERY FOR PROSTATE CANCER: CHANGE IN SEXUAL FUNCTION, SEXUAL SATISFACTION, AND DYADIC SATISFACTION

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Introduction: We assessed men's erectile function (EF) and sexual satisfaction (SS), partners' sexual function (SF) and satisfaction (SS), and their relationship satisfaction from before to nearly 2 years after prostatectomy.

Materials and Methods: Couples were surveyed at baseline (T1=28 patients, 28 partners), 3 months post-surgery (T2=20 patients, 20 partners), and 18 months post-surgery (T3=16 patients, 15 partners) with the The Expanded Prostate Index Composite (EF); the Sexual Experience Questionnaire (men's satisfaction with erections, individual and couple sexuality); the Female Sexual Function Index (female SF, including SS); the Dyadic Adjustment Scale (relationship satisfaction). Demographics were obtained at baseline. A multilevel analysis was used to analyze the data.

Results: EF declined at T2 ($p=0.01$) and improved at T3 ($p=0.02$). Men's satisfaction with erection, individual and couple sexuality declined at T2 ($p=0.001$, $p < 0.001$, $p=0.02$, respectively), and did not change significantly at T3. Female SS, not SF, declined significantly at T2 ($p=0.01$); without significant change at T3. Men's and partners' relationship satisfaction did not change significantly over time ($p=0.2$), but including female SS as a covariate resulted in partners' nearly significant decreased relationship satisfaction ($p=0.09$); men's couple sexuality satisfaction did not affect their relationship satisfaction ($p=0.6$).

Conclusion: Both men's and partners' SS decline after prostatectomy, even as EF begins to rebound. Female SS, not SF, appears to affect partners' relationship satisfaction. Disruption of sexual intimacy early in recovery may affect couples' ultimate sexual outcomes. Limitations are small sample and insufficient time for erectile recovery.

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A SINGLE INSTITUTION'S UTILITY OF USING PENILE DOPPLER ULTRASOUND TO EVALUATE ERECTILE DYSFUNCTION IN PATIENTS WITH PROSTATE CANCER

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Introduction: The incidence of erectile dysfunction (ED) in men following treatment for prostate cancer (PCa) may be as high as 40–60% regardless of treatment modality. The objective of this study was to evaluate penile Doppler (PD) ultrasound parameters and subsequent treatment in patients previously treated for PCa.

Materials and Methods: Between July 2008 and February 2013, 462 patients were evaluated for ED with a PD ultrasound. Among this cohort, 72 patients (15.6%) had a previous diagnosis of PCa. Variables analyzed included demographics, incidence of arterial disease (peak systolic velocity < 30 cm/s), incidence of venous leak [end diastolic velocity (EDV) > 5 cm/s], clinical response, rate of phenylephrine injection and subsequent treatment approach. Patients with PCa were compared to a population control group (N=390, 84.4%; ED of other etiologies) using student t-test and Fisher's exact test.

Results: Patients with PCa were significantly older (mean age 63.2 ± 8.1 vs. 55.3 ± 13.3 years, $p < 0.0001$) and were more frequently African American (61.1% vs. 41.0%, $p=0.002$). PCa patients were more likely to have arterial disease (69.4% vs. 52.3%, $p=0.01$), more likely to have no clinical response to procedural injection (angle 0 degrees – 37.5% vs. 22.3%, $p=0.01$) and less likely to require a phenylephrine injection (6.9% vs. 20.0%, $p=0.007$). Patients with PCa were less likely to be treated with only PDE-5 inhibitors (11.1% vs. 24.6%, $p=0.01$) and more likely to have or be recommended a penile prosthesis (27.8% vs. 11.5%, $p=0.0007$).

Conclusions: Patients previously treated for PCa are older and have poorer PD ultrasound parameters, suggesting a significant arteriogenic etiology for ED. These patients are more likely to pursue penile prosthesis surgery compared to patients with ED of other etiologies.

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MINIMALLY INVASIVE ABLATIVE THERAPY (MIAT): POTENCY RATES IN FOCAL AND TOTAL CRYOSURGERY WITH PRE-OPERATIVE MRI PATIENT OPTIMIZATION AND PENILE REHABILITATION IN PROSTATE CANCER

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The role of MIAT for the treatment of prostate cancer is controversial. Nevertheless, there is increasing interest, patient demand and utilization of MIAT for the treatment of prostate cancer. Indications for MIAT include alternative to: Active surveillance of low risk disease, RP/RT for clinically localized prostate likely to cause harm (metastasis) and mortality, whole gland or targeted (lesion/focal), salvage RP following failure of RT.

Primary cryotherapy is an accepted therapy for the primary treatment of clinically localized prostate cancer. Erectile dysfunction (ED) is reported to be particularly pronounced due to the hypothermic impact on the peri-prostatic nerves. However, since no ligation of the neurovascular bundle occurs the potential for nerve regeneration exists with several series have reported varying degrees of erectile function following cryosurgery. Focal or hemiablation cryosurgery has shown superior results to the recovery of erectile function results appear to support this concept. Significant improvements in ability to localize dominant tumors in the prostate using MRI allow tumor localization, index tumor detection, treatment selection, and disease staging, allowing optimal patient selection for focal or whole gland cryosurgery.

72 patients were treated with primary cryosurgery following MRI. Twelve (12) patients had focal or hemiablation with an overall potency rate of 91% at 6 months of which 25 % required continued oral PDE5 support. Sixty (60) patients treated with whole gland ablation had an overall potency rate of 60% after 18 months with aggressive penile rehabilitation.

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PREDICTIVE FACTORS FOR RETURN OF ERECTILE FUNCTION IN ROBOTIC RADICAL PROSTATECTOMY: CASE SERIES FROM A SINGLE CENTRE.

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Introduction: Post-prostatectomy erectile dysfunction is a frequent complication of robotic radical prostatectomy (RARP). We attempted to retrospectively identify objective predictors of erectile recovery in a population of potent men undergoing RARP.

Methods: Data for 375 consecutive patients was collected prospectively from a single surgeon in an academic institution from 2005 to 2011. Inclusion criteria were 2 years of complete follow-up, pre-operative IIEF scores of > 22 without erectogenic aids/devices, and no adjuvant or hormonal therapy (n=86). We compared perioperative characteristics for two groups of patients based on post-op IIEF. Group 1 with IIEF of > 17 (n=41) and group 2 with IIEF <16 (n=45) at 2 years post-op. Appropriate univariable statistics were performed and multivariable logistic regression was used to identify independent predictors of return of erectile function.

Results: BMI, total OR time and pre-op gland volumes were not different between groups and the averages were 27.8 kg/m², 198.3 minutes and 42 mL. Pre-op grade was similar with 26% Gleason 7, and 74% Gleason 6. Univariate analysis demonstrated higher pre-op PSA and age in group 2 (p = 0.02 and 0.03) as well as less nerve sparing (p < 0.05). Multivariate analysis demonstrated longer apical dissection times as a poor predictor and post-operative ICI rehabilitation as good predictor of erectile recovery (p<0.001 and p=0.017).

Conclusion: With 2 year follow-up we found that apical dissection times negatively predict and post-operative ICI rehabilitation positively predicts return of erectile function after RARP. This can help inform patients of their likelihood of post-operative erectile recovery. Further studies are needed to support the findings of this exploratory analysis.

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LONG-TERM OUTCOMES AND POTENTIAL RISK FACTORS OF ARTIFICIAL URINARY SPHINCTER PLACEMENT FOR URINARY INCONTINENCE AFTER RADICAL PROSTATECTOMY: A SINGLE SURGEON, SINGLE CENTER EXPERIENCE

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Introduction: Urinary incontinence after radical prostatectomy affects patient hygiene, emotional well being and quality of life. Artificial urinary sphincter (AUS) is the gold standard for surgical treatment. We report the long-term follow-up of patients treated with an AUS for postprostatectomy incontinence at our institution. Patients and Methods: Follow up data of 53 patients who underwent AUS placement for post radical prostatectomy urinary incontinence between 2001-2013 was available. Some data was lost due to hurricane Katrina. Patient's demographics, smoking status, comorbidities, previous incontinence treatments, number of pads used/day, surgical approach, previous radiation therapy and surgical revisions were tabulated. Probit regressions were used to analyze the effect of various factors on postoperative complications, surgery success and revision rates.

Results: Mean age was 67.7 (55-87) years and mean follow up time was 32 (2-109) months. As age increases by one year, the odds of seeing complication increases by 1.074 fold. For instance, the probability of seeing complication is 21.48 (1.074x20) fold higher for the age of 75 than for the age of 55. If robotic prostatectomy was used for radical prostatectomy, the probability of seeing complication decreases by 0.172 fold. The odds of observing a postop complication increases by 4.107 fold for cuff size of 4 and 14.87 fold for cuff size of 4.5 when compared to size 3.5. Having a smoking history increases the odds of using of postop pad by 2.624 fold and having any comorbidity increases the odds of having revision by 5.827 fold.

Conclusions: Older age, smoking, larger cuff size, history of medical comorbidities, and surgical approach for radical prostatectomy affect surgical outcomes, complications and revision rates of AUS implantation.

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COMPARISON OF SATISFACTION AND EFFICACY IN HYPOGONADAL MEN ON DIFFERENT TESTOSTERONE SUPPLEMENTATION REGIMENS

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Aim: To compare satisfaction and treatment efficacy in men with symptomatic hypogonadism taking clomiphene citrate (CC), testosterone gel (T gel), and testosterone injections (T injections). **Methods:** Men receiving CC or T gel or T injections for symptomatic hypogonadism (total testosterone < 300 ng/dl) were asked to report satisfaction with their current treatment regimen with ADAM and qADAM scores. Serum testosterone levels were collected on the same day that men filled out the ADAM questionnaire.

Results: The charts of 131 men on testosterone supplementation (31 on CC, 50 on T injections, and 50 on T gel) were reviewed. The mean serum total T levels in men on CC (508ng/dL) was lower ($p<0.05$) than men taking T injections (1056 ng/dL), but similar to T gels (411 ng/dL). Post-treatment testosterone levels were higher in men taking CC, T injections and T gels compared to pre-treatment levels (225 ng/dL, 188 ng/dL, 190 ng/dL $p<0.05$) However men on CC, T injection, and T gel reported similar satisfaction levels. Both the ADAM scores (2.42, 2.97, and 3.33) and quantitative ADAM scores (37.4, 36.9, and 35.0) for the men on different testosterone supplementation regimens were similar. Men taking CC were younger (38.4y) than men taking T injections (48.9y) or T gels (63.2, $p<0.05$). Average follow up was 14.7 months for men taking CC vs. 18.8 months (T injection) and 26.7 months for T gels.

Conclusion: Testosterone supplementation regimens including CC, T gels and T injections are efficacious in improving serum total testosterone levels. However, men taking clomiphene citrate or testosterone gels report similar satisfaction levels despite higher serum total testosterone levels in men taking testosterone injections.

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SERUM HORMONES AS PREDICTORS OF SYMPTOM RESPONSE IN HYPOGONADAL (HG) MEN ON TRANSDERMAL TESTOSTERONE (TDT)

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Introduction: TDT is a well-recognized and effective strategy in the treatment of the majority of men with HG. Increase in total testosterone (TT) and free T (FT) levels have been identified as predictors of symptomatic improvement, although clinical experience demonstrates that not all patients with serum T response have symptomatic improvement. We report hormonal predictors of ADAM questionnaire improvement.

Methods: The study population consisted of men with HG (i) being treated with TDT (ii) who completed the ADAM questionnaire at least 6 months after starting treatment. Labs included TT, FT, E and LH. Symptomatic response was defined as ≥ 3 symptoms improved on the ADAM questionnaire. Correlation coefficients between changes in lab values and symptom response were reported. Multivariable analysis was used to define predictors of symptom response.

Results: 168 men mean age = 49 ± 22 years. Baseline TT, LH and E levels were: 162 ± 187 ng/dl, 4.6 ± 2.8 IU/ml, 22 ± 12 pg/ml. On TDT these levels were: 580 ± 222 , 1.9 ± 2.3 , 46 ± 28 . T/E ratios at baseline and on TDT were: 7.4 (2–35) and 12.6 (4.7–44) respectively. 86% obtained TT levels >400 , 12% had E levels >60 . The change in TT level correlated significantly with symptomatic response ($r = 0.41$, $p<0.01$), as did T/E ratio (0.36, $p=0.015$). Factors predictive of symptomatic response on multivariable analysis are listed in the table.

Conclusion: Besides TT level and change in TT level on TDT, we have shown that T/E ratios are useful predictors of symptomatic response to TDT.

	OR	95 CI	P value
Treatment TT >400	2.6	1.8-3.9	<0.01
≥ 200 point change in TT on TDT	3.8	1.2-5.2	<0.01
T/E ratio ≥ 10 on TDT	1.8	1.4-3.0	0.022
≥ 5 point change in T/E ratio on TDT	2.8	1.6-7.0	<0.01

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RELATIONSHIP BETWEEN VARICOCELE (VX) GRADE AND SERUM TOTAL TESTOSTERONE (TT) LEVELS IN OLDER MEN

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Introduction: We define the relationship between cumulative VX grade and TT in older men.

Methods: Men were older than 50 years of age, had 2 testes and had 2 early morning TT levels measured. TT levels presented represent the mean of 2 measurements. VX score was derived (range 0–6) based on the presence, laterality and size of the VX (0 = no VX, 6 = bilateral grade 3 VX). A correlation coefficient was derived comparing VX grade and TT level and ANOVA was used to compare VX grade for different TT cut-offs. Multivariable analysis was performed to define predictors of TT <300 ng/dl. Factors in the model included: patient age, presence of diabetes, BMI, presence of VX, highest VX grade, VX score, and mean testis volume.

Results: 776 patients mean age = 66 ± 12 years. 144 (18%) patients had a VX; 118 had unilateral and 22 had bilateral disease. VX grade distribution was: 0 = 82%, 1 = 2.2%, 2 = 7.0%, 3 = 4.5%, 4 = 2.4%, 5 = 0.6%, 6 = 0.3%. Men with a VX had lower mean TT levels. Overall, TT levels <300 were observed in 16% of patients with VX; 11% in unilateral and 24% in bilateral disease ($p<0.01$). VX grade was significantly correlated with TT level ($r = 0.46$, $p<0.01$). Mean VX score according to TT: $<200 = 4.2\pm 1.1$, $201-300 = 3.0\pm 1.6$, $301-400 = 1.8\pm 1.4$, $>400 = 1.1\pm 2.2$ (ANOVA, $p=0.028$). Predictors of TT level <300 ng/dl included: diabetes (OR 1.8, 1.3–2.9, $p=0.024$), age (OR 1.9, 1.2–3.7, $p=0.011$), presence of a grade III VX (OR 1.9, 1.4–41, $p=0.026$), and VX score ≥ 4 (OR 2.6, 1.8–3.9, $P<0.01$).

Conclusion: These data support the link between VX and low TT level. These findings indicate a correlation between VX grade and TT. The presence of a grade III VX or a VX score ≥ 4 are independently associated with low serum TT in men more than 50 years old.

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USE OF ANASTROZOLE (AZ) FOR MALE HYPOGONADISM (MHG) IN UROLOGIC PRACTICE

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AZ was FDA approved in 2002 for the management of breast cancer. The efficacy and tolerability of the off label use of aromatase inhibitors (AI) for the treatment of male infertility and late onset hypogonadism (LOH) has been demonstrated in over 15 peer reviewed articles. Despite their efficacy, AI's have not been widely accepted for the treatment of MHG. We retrospectively reviewed our experience with AZ in an academic andrology practice from May 2011 to November 2012. Men presenting with MHG were advised of the off label use of AZ and offered standard Testosterone(T) replacement (gels,injections,or pellets) or a trial of daily AZ (1mg). Baseline labs were drawn and repeated at 6 and 15 weeks then quarterly. Subsequent treatments were predicated on symptomatic relief and T levels. Adverse events were collected at the time of office follow up. 103 men were included with a mean and median follow up of 107 and 63 days (range 20 to 508). See results in the table 1. Hormonal changes were maximized at 30 days and sustained throughout the follow up period. Generic AZ was covered by virtually all third party payers. Compliance was high and monitored by T, gonadotropin, and estradiol levels. 8 patients discontinued therapy for vague symptoms of diarrhea, constipation, headaches, joint pains or jitteriness. Short term generic AZ is well tolerated and effective in treating MHG. AI's offer an inexpensive, effective, and convenient alternative to existing treatment modalities for MHG.

Table 1. Demographics, Baseline Lab Values, and Results												
			Mean Testosterone (ng/dL) (SD)				Mean Estradiol (pg/mL) (SD)			Mean LH (mIU/mL) (SD)		
Primary Dx (N)	Age	BMI	Baseline	Post-Rx	Increase in T	% Increase from Baseline	Baseline	Post-Rx	% Increase from Baseline	Baseline	Post-Rx	% Increase from Baseline
Infertility (29)	38 (6)	30 (6)	311 (78)	*520 (101)	204 (80)	70 (31)	30 (4)	*23 (11)	-35 (24)	5.3 (2.2)	*7 (3)	52 (83)
HGD (74)	54 (12)	31 (9)	281 (100)	*484 (185)	207 (106)	86 (76)	38 (15)	*17 (8)	-48 (27)	3.6 (2)	*6.5 (4)	80 (95)
(* p<0.05 for post-Rx vs. baseline lab values)												

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DOSE TITRATION AND SERUM TESTOSTERONE LEVEL ASSESSMENTS IN PATIENTS TREATED WITH TOPICAL TESTOSTERONE

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Introduction: Topical gels are a common testosterone replacement therapy (TRT) prescribed for hypogonadism in the United States. To confirm a hypogonadism diagnosis and ensure proper dosing, serum testosterone (T) levels should be measured prior to therapy and after initiation to adjust dose. This study describes proportions of patients with T assays and remaining on TRT, and time to maintenance dose among patients receiving topical TRT. Patients and Methods: 4146 adult men initiating topical TRT from 01/01/2011–03/31/2012 were identified in a database of commercially insured beneficiaries. Patients initiated at recommended starting dose (RSD) with AndroGel 1% (n=2391), Testim (n=1043), AndroGel 1.62% (n=376), Axiron (n=192), or Fortesta (n=144) were required to have continuous eligibility and no claims for TRT in the 12 months pre-initiation, and ≥6 months continuous eligibility post-initiation (study period). T assay rates and dose per patient per day relative to RSD were assessed by month. GLM regression controlling for month determined month of maintenance dose attainment. Results: 46% of patients had T assays in the month before initiation; 39% were tested after initiation. By month 6, 37% of patients remained on index TRT, while 43% of patients stopped refilling index TRT (21% in the first month). 20% switched TRT therapy. Although patients started at RSD, mean dose was 105.9% RSD in month 1. Maintenance dose stabilized at month 4 (115.2% RSD), with gradual dose increases to month 6. Conclusions: Less than half of patients had diagnostic T assays before TRT initiation. Fewer had assays to guide dose titration. Meanwhile, failure to refill and dose escalation were seen as early as month 1 and continued to month 6. Setting realistic treatment expectations may help patients remain on therapy.

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ERECTILE FUNCTION, PDE-5 USE AND SEXUAL DESIRE IN A LARGE COHORT OF UNTREATED HYPOGONADAL MEN: BASELINE FINDINGS FROM THE REGISTRY OF HYPOGONADISM IN MEN (RHYME)
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Introduction: Hypogonadism (HG) and sexual dysfunction are common disorders in the aging male. Studies are lacking however of the association between testosterone deficiency and decreased desire and erectile dysfunction in well-characterized hypogonadal men. Patients: RHYME is a multi-center registry of 999 men with clinically-diagnosed HG (naive to androgen treatment) from 25 sites in 6 European countries (DE/ES/IT/NL/SE/UK). Erectile dysfunction (ED), PDE-5 inhibitor (PDE5i) use, and low sexual desire were assessed in all patients (n=999) by medical record review. In sexually active patients (n=752), ED and low sexual desire were also assessed by the international index of erectile function (IIEF). Serum testosterone (T) at baseline was assessed in a central laboratory. Differences in geometric mean T in relation to sexual activity, ED, PDE5i use and low sexual desire were assessed via

linear regression models.

Results: Mean age was 59 years and mean T was 9.5 ± 1.6 nmol/L. Prevalence of decreased desire was 64.7%, erection loss 81.0%, and sexual inactivity 23.6%. Men who were sexually active, according to the IIEF, had higher baseline T relative to inactive men (9.9 vs 8.5 nmol/L; $p < .001$). While men with and without ED had similar T overall, ED patients being treated with PDE5i had significantly higher mean T than untreated men (11.0 vs 9.1 nmol/L, $p < 0.0001$). Rates of PDE5i use were more than twice as high in urology (35.9%) compared to endocrinology or general medicine (16.1%) practices.

Conclusion: Prevalence of sexual dysfunction is high in men with HG naive to androgen therapy. PDE5i use is higher in urology vs. endocrinology and general medicine and is associated with higher endogenous T levels in hypogonadal men with ED.

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REAL-WORLD EXPERIENCE WITH TESTOSTERONE PELLETS FOR TESTOSTERONE DEFICIENCY SYNDROME (TDS)

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Introduction: Testosterone pellet therapy is the only long-acting testosterone replacement therapy (TRT) approved by the FDA. Published experience is sparse outside of clinical trials. The purpose of this study was to assess the safety and efficacy of testosterone pellets.

Methods: Patient age, procedures per patient, pellets per procedure, adverse events, total testosterone before and after pellet insertion, hematocrit, and PSA before and after implantation were collected from retrospective review of men who received testosterone pellets. Paired t-test was done to compare pre and post procedural values using Prism 5.0.

Results: From 11/2010 to 11/2012, 58 patients received Testopel pellets for TDS. Median age was 54 years (range 23–76). One hundred and eleven procedures were done, and 1369 total pellets inserted. Median number of procedures per patient was 1.5 (range 1–6). Median number of pellets for first, second, third, and fourth procedure were 12, 12, 12, and 13.5, respectively. Prior to first pellet implantation, 22 patients were on another form of TRT (gel, $n=13$; intramuscular $n=4$; and patch, $n=5$). Out of 111 procedures, five (4.5%) were complicated by pellet extrusion ($n=4$), or local numbness ($n=1$). Two out of these 5 patients went on to have further pellets implanted. Mean total testosterone was 252 ng/dL (95% CI: 167–336 ng/dL) before insertion and 788 ng/dL (95% CI: 641–934 ng/dL) after insertion ($p < 0.001$). There was no statistically or clinically significant increase in hematocrit or PSA levels and no patients stopped therapy for these reasons.

Conclusions: In our experience, implantation of testosterone pellets is safe with low rates of adverse events. It is often preferred by our patients due to convenience, reliable symptom improvement and lack of transmission risk.

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CHANGES IN TESTOSTERONE LEVELS AMONG HYPOGONADAL MEN WITH AND WITHOUT TYPE 2 DIABETES IN A US HEALTH SYSTEM

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Introduction: Hypogonadism (HG) indicated by low testosterone (T) levels and symptoms like erectile dysfunction (ED), low libido, and fatigue, is more common as men age. Fatigue and ED are also common in men with type 2 diabetes (T2DM). The relationships between HG and T2DM are multidimensional. Men with T2DM tend to have lower T levels, but more research is needed to describe men with HG+T2DM. This analysis describes pre- and post-treatment T levels of HG in men with and without T2DM.

Materials and Methods: A retrospective cohort study using electronic medical records from the Reliant Health System, Worcester, MA, compared HG-only and HG+T2DM cohorts (2008–2010). Descriptive statistics were reported for index (first T test) and follow-up characteristics.

Results: 215 men (175 HG-only, 40 HG+T2DM) had index and post-index T level measures. HG-only men were younger (53.3 ± 11.9 vs. 56.0 ± 9.8 ; NS). Both groups had a higher mean post- vs. index T level: HG-only (386.3 ng/dl vs. 253.9 ng/dl; $p < 0.001$) and HG+T2DM (379.2 ng/dl vs. 230.9 ng/dl; $p < 0.001$). Men with HG+T2DM showed greater absolute change (132.4 ng/dl vs. 148.3 ng/dl). Of the 215 men, 169 (133 HG-only, 36 HG+T2DM) began T replacement therapy (TRT) between index and post-index T level measures. For the 169 men, mean index and post-index T levels were 243.3 ng/dl and 395.9 ng/dl ($p < 0.001$) for men with HG-only; and 234.1 ng/dl and 392.4 ng/dl ($p < 0.001$) for men with HG+T2DM. Conclusion: In this health system, hypogonadal men with and without T2DM had similar mean baseline T levels and both groups experienced significant increases in mean T levels with TRT – on average, reaching eugonadal status. Research to assess if higher T levels are associated with symptom improvement in hypogonadal men with and without T2DM is needed.

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ORAL ENCLOMID (ANDROXAL) RAISES FREE AND TOTAL SERUM TESTOSTERONE IN HYPOGONADAL MEN AND DOES NOT LOWER SPERM COUNTS: COMPARISON WITH A TOPICAL GEL

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1: Repros Therapeutics

Clomid is used off-label in men to raise serum testosterone. It is a mixture of two geometric isomers with different properties. One isomers, enclomid, has effects consistent with estrogen antagonism whereas the other, zucloimid, often acts as an agonist. Many of the inconsistent effects of clomid are overcome with the use of the active isomer, enclomid. A series of studies in hypogonadal men demonstrated increases in serum total testosterone (TT), LH, FSH, estrogen, DHT and free serum testosterone with enclomid over baseline and placebo. ZA-201, a Phase IIB, randomized, open-label study evaluated the effects of daily treatment on

spermatogenesis and hormones in men who washed out of topical T therapy. These men then took enclomid or resumed topical T for 6 months. Enclomid increased testosterone and sperm counts whereas the topical agent demonstrated low sperm counts. ZA-203, a randomized, double blind, placebo controlled, parallel, multi-center, open-label active control comparator, phase IIB study enrolled subjects into treatment with one of two oral doses of enclomid versus topical. Treatment with enclomid elevated TT, LH and FSH and increased sperm count. Topical therapy increased TT but significantly reduced serum LH and FSH. These suppressive effects were associated with a significant reduction in sperm counts after 3 months. We have followed these initial studies and are now in Phase 3 pivotal trials in men with secondary hypogonadism. In conclusion, we believe enclomid (Androxal) significantly increases sperm counts in men previously on exogenous T and preserves sperm counts in men who are in need of testosterone treatment. We believe that Androxal represents a new modality for men with secondary hypogonadism who do not wish to choose elevated testosterone over fertility.

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THE AROMATASE INHIBITOR (AI) ANASTRAZOLE (AZ) MINIMIZES GONADOTROPIN (GT) SUPPRESSION BY LONG ACTING TESTOSTERONE PELLETS (TP): AN OBSERVATIONAL RETROSPECTIVE STUDY.

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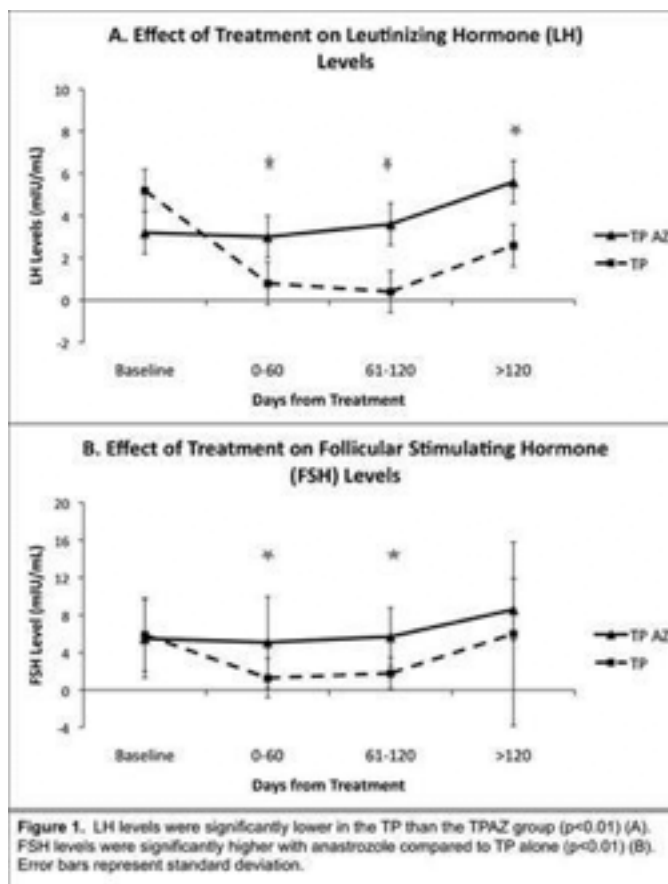
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Introduction: All forms of exogenous testosterone (T) replacement are associated with suppression of pituitary GTs to varying degrees. A common observation of chronic T replacement is testicular atrophy. For that reason, T replacement is not recommended in men in whom fertility is desired. AZ is an oral generic medication that has been shown to be safe and effective in the off-label treatment of male hypogonadism (HG). AZ decreases the negative feedback of estrogen on pituitary GT production. We investigated the effect of AZ on GT levels in men receiving TPs.

Methods: Records of men who underwent TP or TP and AZ (TPAZ) treatment for HG from 2011–2012 were reviewed. Men were offered AZ in addition to TP to decrease the morbidity of multiple TP insertions. Hormone panels were obtained prior to T replacement and then at 6 weeks and 4 months from TP insertion. Men were re-implanted when their T dropped below 350 and they were symptomatic. Demographics and hormone levels were recorded. Data were analyzed with ANOVA and a Tukey's test.

Results: Data from 65 insertions in 38 men were analyzed. Baseline age and hormone levels were comparable between groups. Results are shown in figure 1. GTs were significantly higher with TPAZ than with TP alone ($p<0.01$). GTs remained in the "normal" range in the TPAZ group but were suppressed below normal in the TP group.

Conclusion: Adding an AI to T replacement with long acting TPs minimizes gonadal suppression with TP insertion.



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HYPOGONADISM IS ASSOCIATED WITH INCREASED PENILE CORPORAL HYPOXIA

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Introduction: Androgens have been found to increase blood flow through vasodilation in human penile arteries by binding to androgen receptors in endothelial cells and increasing nitric oxide (NO) production. The increase in NO seen in response to stimulation of cavernosal nerves is dependent on the partial pressure of oxygen in the cavernosal tissue. To date there are no reports linking total testosterone (TT) levels to penile oximetry in humans. We examined the relationship between TT levels and hypoxemia in the corpus cavernosum.

Methods: Men older than 18 yrs presenting to our andrology clinic with a baseline TT were eligible for this study. Baseline demographic information was recorded. Oxygen saturation (stO₂) measurements were recorded with the ODISsey™ tissue oximeter from the corpus cavernosum and glans along with the ears and thighs for controls. Subjects were grouped by T level: <150ng/dL, 150–250ng/dL, and 250–350ng/dL. Statistical analysis was performed with an ANOVA and Tukeys test.

Results: 55 patients had baseline total testosterone levels and penile oximetries. Mean age and SD for the groups were 53(17), 52(13), and 57(13) for T<150, 150–250, and 250–350, respectively

(p value NS). StO2 in the corpora cavernosa was substantially lower in men with a TT <250 vs. 250–350 group ($p<0.05$). stO2 for the corpora in the different groups were 30.9(15.6), 32.7(13.6), and 43.4(10.4) for T<150, 150–250, and 250–350, respectively. This association was not seen in men younger than 45 yrs. StO2 in the ear, thigh, and glans were not significantly different.

Conclusion: Hypogonadism is associated with severe hypoxemia in the corporal cavernosum of older men.

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A PILOT PROSPECTIVE STUDY ON THE EFFECT OF IMPLANTABLE TESTOSTERONE REPLACEMENT ON PENILE OXIMETRY AND SEXUAL FUNCTION

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Introduction: Erectile Dysfunction (ED) has been associated with penile atrophy, smooth muscle apoptosis and increased interstitial collagen deposition. The corpora in the flaccid state have been demonstrated to be in a relative hypoxic state that becomes normoxic in the erectile state. The observed pathologic changes are postulated to occur in the setting of the chronic hypoxic state associated with ED. It has been demonstrated that men with ED have significantly lower resting corporal oxygen saturation than men without ED and that men with significant hypogonadism have fewer nocturnal erections. The association between hypogonadism and corporal hypoxia has never been demonstrated.

Methods: Symptomatic, hypogonadal men ($T < 250 \text{ ng/dL}$) were prospectively recruited from an academic andrology practice. ED was not an inclusion prerequisite. Baseline studies included a hormonal panel, oximetry, ADAM, IIEF, and erection hardness score. These studies were repeated at 6 and 12 weeks. Oximetry was measured at the ear, thigh, corpora and glans.

Results: Nineteen men were enrolled. Thirteen men completed the study.

Conclusion: This small, pilot study demonstrates the clinical and physiologic penile benefit of testosterone supplementation. When compared to previous studies looking at penile oximetry, this cohort has the lowest baseline corporal value. A link between hypogonadism and corporal hypoxemia was elicited although the result was not recoverable (over the three month study period).

	Baseline	6 weeks	12 weeks	P value
Testosterone	165	600	384	<0.001
ADAM	31.1	34.5	34.7	0.007
BIF	37.8	52.2	48.8	0.037
EHS	2.6	3.2	3.1	0.012
		OXIMETRY		
Ear	70.9	73.4	74.1	NS
Thigh	53.5	56.8	54.6	NS
Corpora	27.5	30.3	25.2	NS
Glans	60.1	65.0	65.4	NS

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ASSESSING EXPERIENCE AND OUTCOMES WITH COMBINED USE OF PHOSPHODIESTERASE-5 INHIBITORS IN ERECTILE DYSFUNCTION TREATMENT

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Introduction: Phosphodiesterase-5 inhibitors (PDE5i) are safe and well-tolerated but not all achieve satisfactory response. There have been reports of successful outcomes using combinations of PDE5i. However, this may be considered off-label use.

Objectives Determine frequency of combination PDE5i use amongst clinicians and assess reported outcomes.

Methods: Web-based survey distributed to members of BASHH & SMSNA.

Results: 123 clinicians completed the survey (62% urologists, 27% sexual health physicians and 6% General Practitioners). Mean number of patients each reported treating per month was 90 (range 2–300). Initial treatment of choice was PDE5i in 69%, intracavernosal injection 17%, VED 6%, MUSE 2% and psychosexual therapy 6%. Estimated satisfactory response to PDE5i ranged between 15 – 100% (mean 63%). 37% of the respondents had experience with prescribing PDE5i combinations. Combination PDE5i's were prescribed in 7.5% of patients reporting partial response to a single PDE5i and 10% reporting no response. Improved response with was estimated in 7.5% of patients with partial response and 8% with no response to a single PDE5i. The majority (60%) recommended daily tadalafil 5mg alongside on-demand dosing with any PDE5i. Majority (77%) reported no increased adverse events. All of the remaining 23% reported only minor side effects.

Conclusions: Combined PDE5i use may be a reasonable treatment option in those with unsatisfactory response to single PDE5i therapy. More studies are required to explore efficacy, safety and tolerability of PDE5i combination therapy.

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VIBERECT® PENILE VIBRATORY STIMULATION SYSTEM: EVALUATION OF ITS ERECTOGENIC EFFICACY

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Introduction: Current strategies used to treat erectile dysfunction (ED) target the vascular component of erection physiology to achieve tumescence and rigidity. The Viberec® handheld device, a new FDA-cleared ED treatment, which exploits vibratory stimulation of genital afferent nerves for provoking erections, has not been rigorously assessed in clinical studies. The aim of this study was to assess the erectogenic stimulatory potential of the Viberec®.

Subjects & Methods: Subjects were 5 healthy men (mean age 26.4 yrs) with normal erectile function as measured by responses to the IIEF-EF. They were instructed on a penile stretching exercise

meant to stimulate the bulbocavernosus reflex (BCR) to achieve reflex erection. After achieving full flaccidity, the Viberect® treatment at 75 Hz with ventral stimulation was initiated without any external visual sexual stimulation. Both objective Rigiscan measurements of rigidity and subjective Erection Hardness Score (EHS) responses were recorded and correlated. Tolerant and safety were monitored.

Results: Rigiscan demonstrated that 4/5 patients achieved tumescence episodes beyond 60% total rigidity (considered the minimum required to achieve a non-buckling erection capable of vaginal intromission). EHS scores of 4/4 (penis is completely hard and fully rigid) were noted in 2 patients, 3/4 (penis hard enough for penetration but not completely hard) in 2 and 2/4 (penis is hard but not enough for penetration) in 1. There were no adverse events noted.

Conclusion: This study provides evidence that Viberect® produces a non-invasive, well-tolerated erectogenic effect. These results indicate that penile vibratory stimulation can be employed to provoke erections via neurostimulatory principles and support further study of this modality in treating men with ED.

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A COMPLICATION OF RECURRENT PENILE INFECTION IN THE PRESENCE OF SYNTHETICALLY RECONSTRUCTED CORPORA CAVERNOSA

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Introduction: The use of synthetic grafts for corporal reconstruction has declined with the advent of biological alternatives. It is still possible to encounter these grafts in a complex, revision implant surgery. The standard for penile implant infections includes either salvage or removal of the prosthesis. There can be uncertainty in the management of these grafts in this acute setting. We report a case of persistent infection secondary to a retained synthetic graft after prosthesis removal.

Materials and Methods: A 64 year old male had multiple penile implant revisions over 25 years due to mechanical failure and infection. He most recently underwent revision due to an aneurysm of one cylinder. Five weeks postoperatively, he developed an infection requiring complete removal of all components of the prosthesis. Two months later, he developed a recurrent infection of the penis and scrotum. On review, 15 years prior, he underwent left corporal reconstruction using Gore-Tex, which was still in place. He underwent scrotal exploration and washout.

Results: The patient was found to have a draining sinus leading to a Gore-Tex graft in his left corpus cavernosum. A corporotomy was made and the graft was found to run the entire length of the corpora. The graft was removed intact and the wound was irrigated and closed with no other signs of infection. The patient is now free of infection.

Conclusion: Management of prosthetic infections continues to be a vexing problem. We present this case to demonstrate that in the most complex of implant patients, eradication of an infection may require the identification and removal of any possible remaining synthetic material, in addition to the prosthesis. Failure to consider this may result in persistent infection and repeated procedures as demonstrated in our experience.

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WHERE IS THE REAR TIP EXTENDER? THE ART OF CORPOROSCOPY FOR REMOVAL OF RETAINED PENILE PROSTHESIS COMPONENTS

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Introduction: Rare reports of corporoscopy exist in the literature. It is a technique that is rarely used, but an important tool that should not be forgotten when dealing with complex cases in prosthetic surgery. During the exchange and removal of penile prosthesis we may encounter a situation that brings up the question, "Where is the rear tip extender (RTE)?" Various techniques have been described for removal of RTE's, including the usage of a 5th digit, irrigation, and dilators. In this abstract we demonstrate the use of corporoscopy to retrieve a retained rear tip extender.

Materials and Methods: A 54-year-old man presented with infection of his Coloplast Titan inflatable penile prosthesis. At the time of removal and salvage, it was noted that the right RTE was retained within the corpora and several failed attempts at removal were made. We then proceeded with a final attempt via corporoscopy.

Results: A 17.5 Fr flexible cystoscope was introduced into the right corpora, utilizing sterile normal saline irrigation. The RTE could be visualized with tissue in-growth deep within the right corpora. Using alligator graspers, the tissue adhesions were dissected off, and the RTE was successfully removed. The remainder of the procedure was completed following a modified Mulcahy salvage protocol.

Conclusion: Retained implant material poses a difficult situation in revision prosthetic surgery. Failure to remove these products increases the risk of infection, can cause discomfort/pain, and risk inappropriate seating of the cylinders. Corporoscopy has previously been utilized for the diagnosis of corporal perforation, as a guide during dilation and trans-corporal resection of scar tissue. We have demonstrated that it may also be safely used when the question comes up, "Where is the rear tip extender?"

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THE MINIMALLY INVASIVE, NO-TOUCH ("MINT") TECHNIQUE FOR PENILE IMPLANT SURGERY

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Introduction: The minimally invasive infrapubic inflatable penile implant procedure was developed by Dr. Perito with the aim of minimizing operative time and post-operative morbidity (Perito, J Sex Med 2008; 5: 27-30). Dr Eid has also demonstrated a significant reduction in post-operative infections with his No-Touch technique (Eid et al. Urology 2012; 79: 1310-5). Using the principles and advantages of both of these procedures, we have developed a number of modifications that have been combined into a new technique.

Patients and Methods: The principles of the MINT technique involve an infrapubic approach combined with a no-touch technique facilitated by using 2 standard surgical drapes (1 x clear non-adhesive drape and 1x Ioban® drape) and an Alexis® wound retractor. We present results for our first 50 patients undergoing

primary prosthesis implantation from May 2012 – July 2013. Patients with complex surgery necessitating >1 incision were excluded.

Results: Average age (\pm SD) was 59.8 (\pm 11.3) years. Patients had one or more of the following etiologies for erectile dysfunction: vascular disease (n=22), post-radical prostatectomy (n=16), diabetes (n=8), Peyronies disease (n=8), venous leak (n=4) and priapism fibrosis (n=1). 70% had used intracavernosal injections. Implant used: Coloplast Titan (n=47), American Medical Systems (LGX; n=2), (CX; n=1). The average (\pm SD) cylinder and rear tip extender length was 18.7 (\pm 1.6) and 0.9 (\pm 0.8) cms respectively. 65% could cycle prosthesis by 4 weeks. All patients have been followed-up for at least 3 months. There have been no post-operative infections.

Conclusion: The MINT technique for penile implants is a safe and reproducible procedure with a zero short-term infection rate in our first 50 patients.

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SUPERFICIAL DORSAL VEIN INJURY/THROMBOSIS PRESENTING AS FALSE PENILE FRACTURE REQUIRING DORSAL VENOUS LIGATION

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Introduction: Conditions mimicking penile fracture are extremely rare and have been seldom described. To our knowledge no other study has described superficial dorsal vein injury/thrombosis presenting as false penile fracture requiring dorsal vein.

Methods: A 33-year-old male presented with penile swelling and ecchymosis after intercourse. A penile ultrasound demonstrated a thrombosed superficial dorsal vein, but also questionable fracture of the tunica albuginea. As the thrombus was expanding, he was emergently taken to the operating room for exploration and required only dorsal venous ligation.

Results: Post operatively patient's SHIM score was 23 and he has had no issues with erections or sexual intercourse.

Conclusion: Due to the possible complications of conservative management and in view of excellent results of surgical exploration and maintenance of erectile function, early exploration in patients with suspected false penile fracture is recommended. Dorsal vein ligation in the setting of thrombosis preserves the integrity of the penile tissues and avoids unnecessary complications from conservative management.

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CAN THE RESULT OF PENILE DOPPLER ULTRASONOGRAPHY PREDICT THE RESPONSE TO PDE-5 INHIBITORS IN PATIENTS WITH ERECTILE DYSFUNCTION?

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It is difficult to evaluate the clinical efficacy and safety of phosphodiesterase type 5(PDE5) inhibitors before the treatment trial. We evaluated whether the result of penile Doppler ultrasonography could predict the response to PDE-5 inhibitors. A total of 108 consecutive men with symptoms of ED were evaluated

for penile vascular integrity by penile Doppler ultrasound. Among them 63 patients who satisfied the inclusion criteria and were able to evaluate the response to PDE-5 inhibitors by telephone questionnaire and chart review entered this study. We compared the erection states and hemodynamic findings of Penile Doppler ultrasonography after the intra-cavernous injection of alprostadil(CaverjectTM) 20mcg according to the responsiveness to PDE5 inhibitors. Responder group (RG) was defined as having the response to PDE-5 inhibitor in case of lasting full erection state. 29 patients (46%) were responder and 34 patients (54%) were in non-responder group (NRG), and there was no difference between two groups in ages and comorbid disorders. 22 cases (75.9%) in the RG were represented 3 or 4 of erection hardness score (EHS), and that is much more than 7 cases (20.6%) in the NRG ($p<0.05$). However, there were no significant distributional differences in the penile hemodynamic findings including non-vascular, arterial insufficiency or venous occlusive dysfunction between two groups ($p>0.05$). This finding provides that the pattern of penile Doppler ultrasonographic findings came to no good for predicting the efficacy of using PDE-5 inhibitors.

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SCREENING FOR SEX OFFENDERS IN SEXUAL MEDICINE - ETHICAL, LEGAL AND SOCIAL CONSIDERATIONS

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Introduction: Treating sexual dysfunction in patients with prior sex offenses poses ethical and legal dilemmas to urologists. Sex offenders are not obligated by law to disclose this status to medical professionals; therefore may be unknowingly treated. Sexual dysfunction among sex offenders is well-documented with prevalence up to 20%. Prevalence of sex offenders seeking evaluation for sexual dysfunction is unknown. Social implications include recent banning of Medicaid reimbursement for treatment of impotence in sex offenders.

Patients/Methods: All new patients in sexual dysfunction clinic are asked about history of sexual offenses. Follow up questioning is pursued if positive history is obtained. The Sex Offender Registry Board is queried as cross reference. Ethical and legal counsel are involved if necessary.

Results: Using screening protocol 7 cases of registered sex offenders were identified over 1 year in a dedicated sexual dysfunction clinic (two Level 1, one Level 2, four Level 3). In 5 of 7 cases, status was disclosed voluntarily. Prior to disclosure, 5 patients had been treated for dysfunction. Legal counsel noted no precedence for these cases. Ethics committee concluded that treatment shall be left to the discretion of the provider.

Conclusion: Screening protocol for sex offenses leads to identification of patients who otherwise may be treated unknowingly and allows for further questioning. Risk for re-offense can be considered. Decision to treat can be rendered on an individual basis. Multi-disciplinary teams aid in establishment of protocol at an institutional level.

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SEX ADDICTION: MYTH OR REALITY

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Objective: To determine whether hypersexual behavior can appropriately be characterized as an addiction, or rather, a symptom or manifestation of a co-existing Axis I or Axis II Disorder. **Design and Methods:** A literature review is being conducted to explore these opposing viewpoints. Articles published from the year 2000 to present relating to the topic of sex addiction/hypersexuality/ sexual compulsivity/ impulsivity are reviewed.

Results: The concept of sexual addiction was introduced in the 1970's. Two schools of thought have. Proponents of sex "addiction" argue that the neurochemical changes associated with hypersexual behavior are quite similar to that of drug addiction. They argued that sex "addicts" can experience a psychological withdrawal as experienced by those addicted to drugs of abuse. Some proponents of sex addiction even advise a 12-step treatment program. Critics of sex addiction argue that increased sexual activity is a way of alleviating affective symptoms, or is reflective of the impulsivity, associated with concomitant Axis I or Axis II pathology. They postulate that treating the underlying psychiatric disorder would ameliorate hypersexual behavior.

Discussion: Despite standard, and even increasing use of the term "sex addiction" in media and popular culture, mental health professionals remain divided in regards to this subject. The proposed inclusion and subsequent rejection of hypersexual disorder in DSM-V highlights this existing debate. The notion of hypersexual behavior as an addiction warrants further exploration, especially since how it is defined may dictate treatment modality.

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SEXUAL DYSFUNCTION SYMPTOMS IN BRAZILIAN ADOLESCENTS – PRELIMINARY RESULTS

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Introduction: Few studies have analyzed the sexual lives of female adolescents in developing countries. Our aim was to assess the rate of and identify possible risk factors for sexual dysfunction symptoms among Brazilian adolescents.

Patient and Methods: Cross-sectional study involving 91 adolescents managed at a free family planning clinic (09/2012–05/2013). The Female Sexual Function Index (FSFI), a self-responsive questionnaire, was used to assess desire, arousal, orgasm, lubrication and dyspareunia. Women scoring ≤ 26 were classified as being at risk for sexual dysfunction.

Results: Mean age was 17.6 (± 1.4 standard deviation) years, most (51.7%) were of mixed race (black and white ancestry), single (71.4%) and had 8–12 years of schooling (88%). Mean age at first sexual intercourse was 14.7 (± 2.2) years, and over half reported having only one sexual partner (50.5%). Monthly injectables (22%) and condoms (20.9%) were the most frequently used contraceptive methods. Mean overall FSFI score was 27.3 ± 4.7 and desire was the domain with the lowest mean scores (4.1 ± 0.9). Almost 40% of

the adolescents (34/91) were classified as being at risk for sexual dysfunction symptoms (FSFI ≤ 26) and 85% (77/91) were under the cut off for sexual desire dysfunction symptom (desire score ≤ 5). The proportion of Black adolescents with sexual dysfunction symptoms was significantly higher than of White adolescents (76.9% versus 12.9% respectively, $p < 0.0001$). The study is ongoing; once the sample size reaches 150 participants, we plan to perform more detailed analyses to assess possible risk factors for sexual dysfunction symptoms.

Conclusions: Over 80% of Brazilian adolescents managed at a public family planning clinic were at risk for sexual desire dysfunction symptoms.

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SINGLE INCISION VASECTOMY REVERSAL (SIVR)

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Objective: To describe the Single Incision Vasectomy Reversal (SIVR). An innovative approach to vasectomy reversal (VR) by which the entire procedure is performed through a single midline mini-incision.

Materials and Methods: A SIVR was considered in the absence of large vasal gaps, sperm granulomas or limited mobility of the scrotal contents. As in the no-scalpel vasectomy (NSV), the SIVR begins by stabilizing the vas directly under the scrotal skin at the midline raphe. The NSV ring clamp is used to capture the vas at the vasectomy occlusion site. A single small (<1 cm) opening in the skin is created and the vas is delivered through the midline incision. The mobile and compliant the scrotal skin allows the vas to be delivered through the opening despite the small size of the incision. Once both ends of the vas have been delivered, the anastomosis is completed according to surgeon preference. The contra-lateral vas is approached via the same incision but through separate opening in the dartos muscle to ensure a tension-free anastomosis. The small opening in the skin closed with a single dissolvable suture.

Results: Of 104 consecutive vasovasostomy VR, a SIVR was attempted in 22 patients (21%). Mean patient age was 39 years (range: 29–48) with a mean vasal obstructive interval of 5.2 years (range: 3 months–11 years). Post-operative semen parameters and/or a confirmed pregnancy was available in 10 men. Patency was established in all patients. Mean sperm concentrations and % motile sperm were 27 million/ml and 56%, respectively. In one patient, a superficial hematoma was identified that resolved with conservative management.

Conclusions: A SIVR is feasible without compromising patency rates or semen parameters and may translate into less postoperative discomfort and quicker functional recovery.

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UROLOGIST'S PERCEPTION AND PRACTICE PATTERNS IN PEYRONIE'S DISEASE; A KOREAN NATIONWIDE SURVEY INCLUDING PATIENT'S SATISFACTION

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Purpose: To illustrate the physician's perception and real practical patterns on Peyronie's disease (PD), a nationwide survey was performed for Korean Urologists.

Materials & Methods: A specially designed questionnaire exploring practice characteristics and attitudes on PD, as well as the patient's satisfaction from each treatment modality was e-mailed to the randomly selective 2421 urologists.

Results: Responses were received from 385 (15.9%) practicing urologist, with median time after certification as an urologist was 12 years. Among them, 263 (78.3%) were from non-training hospital. Regarding the natural course, 87% of respondent believed that PD is progressive disease, and 82% replied that the spontaneous healing in PD is occurred below 20% of patients. As for diagnosis on PD, the methods used were in order of history taking with physical examination (98%), IIEF questionnaires (40%), intracavernous injection and stimulation (35%), and duplex sonography (28%). Vitamin E was most preferred as initial medical management (80.2%), followed by PDE-5 inhibitors (27.4%), and Potaba (20.1%). In urologist who performed intralesional injection, the injected agent was in order of corticosteroid (72.2%), verapamil (45.1%) and interferon (3.2%). The most frequently performed surgical procedure was plication (84.1%) followed by excision & graft (42.9%), and penile prosthesis implantation (14.2%). Between the most popular ways in each modality, the urologists' perception on suitability of treatment and the patients' satisfaction was significantly different, favoring plication surgery.

Conclusion: The urologist's practice pattern depicted in this survey is in the same line with currently available western guidelines, indicating the need to develop further local guidelines based on solid clinical data.

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PEYRONIE'S DISEASE; TREATMENT OUTCOME IN A SERIES OF 76 MEN PRESENTING FOR OFFICE EVALUATION OF ERECTILE DYSFUNCTION

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Our aim was to evaluate treatments of Peyronie's patients presented for evaluation of erectile dysfunction.

Patients and Methods: 76 patients included, all had Peyronie's disease, erectile dysfunction and filled out a ED questionnaire, all were examined, evaluated and received their treatment, no exclusions criteria but we enrolling from the study any patient had history of phosphodiesterase inhibitors or Intracavernosal Injection. Our eligibility for diagnosis of PD was palpable penile plaques.

Oral treatments applied for all during first visit, topical Verapamil cream given to 15 patients, intralesional injection of Verapamil used in 27 (11 men from those who failed topical therapy and 16 who reported worsening of their erectile quality under oral therapy) and finally surgical intervention in 19 patients.

Results: Out of 76 patients, 51 completed this study, 9 reported

some subjective improvement, 15 reported stabilization of their condition and underwent to Verapamil gel, of those 4 reported some subjective improvements, 11 shifted to intralesional injection and 27 had subjective worsening of their erectile quality, those with Intralesional injection, 6 had substantial improvement, 3 complete resolution of pain and 18 had no improvements. The remaining 11/27 who reported worsening of erectile quality, 5 requested surgery and 6 request no further therapy, in men underwent surgery, all reported reasonable response and 3 reported mild penile curvatures.

Conclusion: Medical treatment lead to subjective improvement and stabilization of pain. No patient reported complete resolution on intralesional injection, Surgery indicated in men with severe ED

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COMPARISON OF RELATED SYMPTOMS BETWEEN CIRCUMCISED AND UNCIRCUMCISED

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Introduction: Debate concerning the necessity of circumcision is remains unresolved. Evidence concerning the association of sexually transmitted diseases and circumcision is conflicting. The current study aims to identify possible sexual and voiding symptoms in adults associated with remaining uncircumcised.

Materials and Methods: All patients visiting the outpatient urology office, above forty, were consecutively enrolled from March to May, 2013. Patients were identified on their circumcision status and were asked to identify the presence of putative symptoms from a symptom questionnaire. The questionnaire queried the presence of voiding symptoms, sexual symptoms, as well as symptoms putatively associated with penile surgery (irritation, malformation, decreased sensory).

Results: 179 patients participated (82 uncircumcised, 97 circumcised). The mean age was 59.0±10.6 years (40–78 years) with no significant difference between circumcised and uncircumcised groups. The mean age that patients received circumcision was 26.8±9.1 years with a mean elapsed 30.0±11.1 years since circumcision. There was no significant difference in patients who reported malformation (3.7% uncircumcised, 4.1% circumcised, p=0.59), increased irritation (6.1%, 10.3%, p=0.23), or decreased sensory stimuli to the penis (7.3%, 7.2%, p=0.60). Uncircumcised patients reported a significant increase in voiding symptoms (56.1% vs. 22.7%, p<0.001) and sexual symptoms (42.7% vs. 29.9%, p=0.048) compared to circumcised patients. Of voiding symptoms, only dysuria was related to remaining uncircumcised (7.3% vs. 1.0%, p=0.036). For sexual symptoms, erectile dysfunction was the only relevant symptom (28.0% vs. 16.5%, p=0.046).

Conclusion: Uncircumcised patients reported an increase of dysuria and erectile dysfunction compared to circumcised patients.

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FULL BIOCHEMICAL DIAGNOSIS OF HYPOGONADISM AT THE FIRST VISIT INCLUDING LH – EXPERIENCE OF AN ANDROPAUSE CLINIC

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Introduction: Recommendations have been published on hypogonadism. However, no international consensus on diagnosis and follow up exist. The andropause clinic in Quebec has decided to establish its own consensus based on Quebec expert opinion from different specialties. Current recommendations suggest that a biochemical diagnosis be conducted during the first visit (Total testosterone; TT) and the second visit if TT is moderately low or borderline (TT, Sex Hormone Binding Globulin, calculated Free Testosterone, Luteinizing Hormone [LH] and prolactin in some Bioavailable Testosterone). Serum LH is recommended to distinguish between primary (testicular) and secondary (pituitary-hypothalamic) hypogonadism. However, clinical observation suggests that the rate of attending a second visit is low and the opportunity to obtain these measures may be missed.

The purpose is to provide physicians with recommendations on procedures for diagnosing hypogonadism using biochemical measurements including LH as soon as the first visit.

Methodology: Ongoing expert meetings from different specialties in Quebec, Canada (family medicine, urologists, endocrinologists, psychiatrists, sexologists, cardiologists and nutritionists) were conducted. The first recommendations were proposed in 2005 and subsequent changes added on a yearly basis.

Result: Expert opinion suggests that biochemical measures traditionally taken during the first and second visits now be combined into the first visit.

Conclusion: To assess biochemical measurements including LH as soon as the first visit ensures that the patient is correctly investigated and will be managed accordingly.

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SUBJECTIVE SIDE EFFECTS AND HORMONAL PROFILES IN MEN WITH HYPOGONADISM ON ANASTROZOLE AND CLOMIPHENE THERAPY

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Introduction: Anastrozole and Clomiphene citrate are used in the hypogonadal male because they subvert traditional feedback inhibition mechanisms of testosterone replacement therapy (TRT). These medications often require dose adjustment secondary to desired blood levels. We present our experience using both of these medications in hypogonadal men with concomitant elevated estradiol levels.

Materials and Methods: We retrospectively reviewed the charts of 25 men with hypogonadism and elevated serum estradiol who initiated therapy with both Clomiphene and Anastrozole. All patients were asked if they experienced any new side effects at each visit throughout follow up period. The changes in total testosterone, free testosterone, bioavailable testosterone, and

estradiol levels were calculated after one year of treatment with both agents. Patients were screened for visual field changes and hepatic function.

Results: The average one year total testosterone increase (ΔT) was 373.28 ng/dL, average free testosterone increase (ΔFreeT) was 59.83 ng/dL, average bioavailable testosterone increase (ΔBioT) was 87.89 ng/dL, and average estradiol decrease (ΔE) was -8.40 pg/mL. Of the 25 patients the only side effect reported was headache, in 3 patients which abated despite continuation of the medication. No hepatic dysfunction or visual field deficits were observed. The median Anastrozole dose was 1.5mg po divided TIW, and the median Clomiphene dose was 150mg po daily.

Conclusion: Anastrozole and Clomiphene citrate used at these doses in combination to normalize male hypogonadism appear to be effective in increasing total, free, and bioavailable testosterone as well as normalizing estradiol levels with minimal significant side effects at one year of treatment.

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THE IMPACT OF AN EDUCATIONAL TOOL ON PATIENT CHOICE REGARDING TESTOSTERONE REPLACEMENT THERAPY

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This pilot study examined the pre-conceived knowledge and attitudes towards testosterone replacement therapy (TRT) among 11 men diagnosed with symptomatic hypogonadism referred or self-referred to the Vanderbilt Urologic Surgery Department using a pre and post survey. Participants viewed an informational pamphlet illustrating the risks, benefits, and alternatives to testosterone replacement therapy (TRT). There was a 9.1% increase in the number of individuals who answered "yes" and in those who answered "no", while "maybe" decreased 18.3% but there was no difference in the individuals who selected "I don't know" regarding their attitude in pursuing TRT following an informational pamphlet intervention. At baseline, 54.5 percent of the participants were interested in using topical gels, which changed after the intervention to most participants (63.6%) interested in using testosterone patches. Interest in pursuing pellets decreased by 18.2% and topical gels decreased by 9.0%. The mean number correct on the knowledge assessment regarding TRT increased 6 points after informational intervention (20.5 vs. 26.5, p-value <.05). After reviewing the informational pamphlet, participants demonstrated improved knowledge regarding TRT benefits and risks. Providing a decision aid to symptomatic hypogonadal males considering TRT should be a first step in educating patients, because it may have an impact on their choice of replacement therapy or whether they pursue replacement therapy at all. This pilot study encourages future research to create and implement a universal decision aid tool into practice for those considering TRT.

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PREOPERATIVE STAGING OF PROSTATE CANCER: TRANSRECTAL ULTRASOUND (TRUS) IN CORRELATION TO THE EXPERIENCE OF THE UROLOGIST – HOW MUCH IS NEEDED, TO PERFORM A “SAVE” NERVE SPARING RADICAL PROSTATECTOMY?

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Introduction: The aim of the study was to compare preoperative transrectal ultrasound (TRUS) findings with the histopathological stage after radical prostatectomy (RP) and the dependence to the experience of the physician to determine the value of TRUS in preoperative staging of prostate cancer, especially with regards to perform a “save” nerve sparing RP.

Materials and methods: In 300 RP specimens histopathological and ultrasound findings were correlated. TRUS was performed by 20 physicians. Experience levels: group 1= <1 year of TRUS experience, group 2= 1–3 years, group 3= 3–5 years, group 4= >5 years. Histopathology: pT2a (n=78; 26%), pT2b (n=128; 42.7%), pT3a (n=55; 18.3%), pT3b (n=36; 12%), pT4 (n=3; 1%).

Results: Overall organ-confined prostate cancer (ocPC) (T2a/b) was correctly identified with TRUS in 81% and capsular penetration (T3/T4) in 37%. Sensitivity of TRUS in ocPC was 0.81, specificity 0.43 and the positive predictive value 0.76. Sensitivity, specificity and positive predictive value (PPV) of TRUS for stage T3 were 0.37, 0.87 and 0.56 respectively. Statistical evaluation of sensitivity, specificity and PPV in comparison to the experience levels showed significant difference between the groups (gp1: Sens.: 0.90, spec.: 0.23, PPV: 0.70; gp2: 0.81, 0.36, 0.67; gp3: 0.79, 0.41, 0.76; gp4: 0.91, 0.45, 0.83) ($p < 0.05$).

Conclusion: Overall these results show a high sensitivity for ocPC but a low sensitivity in T3 stage and low specificity in ocPC due to the results of the inexperienced groups. The evaluation showed a significant correlation between the staging quality and the experience level of the physicians. Especially in terms of “correct” preoperative staging before performing a “save” nerve sparing RP, education and training in TRUS is highly recommended.

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PEDIATRIC TESTICULAR MICROLITHIASIS

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Introduction: Testicular microlithiasis is a rare disease and its frequency detected by ultrasonography has been reported 0.6%–9%. But relatively small number of cases has been reported for the pediatric age group. Severe calcification of the seminiferous tubules has been detected at this entity. Testicular germ cell neoplasies and infertility have clinical importance in this group.

Material and Methods: A total of 21 testicles in 13 children diagnosed with typical microlith formations were diagnosed and followed up in our clinic between 2001–2013. All charts were evaluated retrospectively and undescended testicle (7 case), varicocele (2), acute scrotum (2), trauma (1) and developmental delay (1) were the complaints in this group of patients.

Results: Median age was 8.8 (3–19) years. Follow up period was changing between 1–13 years under ultrasonographic surveillance

in every 6 mo. or 12 mo. basis. No malignancy was detected in this period.

Conclusion: Testicular microlithiasis is more common in undescended testicle which should be investigated by scrotal ultrasonography. Although frequency of examinations can be diminished and advised in pediatric age group and the parents should be informed about the long term follow up necessity, due to possible malignancy and infertility problems.

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PATIENT PRE-OPERATIVE DIAGNOSIS AS A PREDICTOR FOR SPERM RECOVERY FROM TESTICULAR BIOPSY IN AZOOSPERMIC MEN

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Testicular sperm extraction (TESE) from azoospermic men can improve sperm retrieval for intra-cytoplasmic sperm injection (ICSI). The ability to predict the presence of sperm from therapeutic TESE without a prior diagnostic testicular biopsy is a challenge in these patients. The objective of this study is to determine if a patient's cause for azoospermia can reliably predict whether there will be viable, motile sperm recovery with TESE. This is a retrospective case series looking at 165 men who underwent TESE for use in ICSI from September 2000 to June 2013 at a single centre. TESE outcome parameters assessed were: presence of spermatozoa in fresh extract, sperm viability, and sperm motility in fresh and frozen extracts. These parameters were compared in men with obstructive azoospermia (OA) and non-obstructive azoospermia (NOA). Men with NOA were then divided into broad subgroups (congenital anomalies, history of varicocele, secondary hypogonadism, and other causes) and evaluated. The data was analyzed using Chi-square, ANOVA, and Fisher's exact tests as applicable. Compared to men with NOA, men with OA were found to have a significantly higher proportion of sperm in fresh tissue extract (98% vs. 31%), as well as motility in fresh (98% vs. 29%) and frozen-thawed extracts (88% vs. 21%). Men with OA were significantly older than men with NOA (38.3 vs. 34.5). Men with previous vasectomy had significantly better retrieval of viable, motile sperm (100%; 100%), compared to men with varicoceles (56%; 50%), congenital disorders (25%; 25%), or hypogonadism (20%; 15%). Although clear trends, there was no statistical difference in sperm recovery between NOA subgroups. This study can be used to help counsel men about the probable outcome of their TESE based on their pre-operative diagnosis.

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PENILE EPITHELIOID HEMANGIOMA: CASE REPORT AND REVIEW OF LITERATURE

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Introduction: Penile epithelioid hemangioma is a very rare benign vascular neoplasm of unclear etiology. While epithelioid hemangiomas are well documented lesions of the head, neck, and extremities, involvement of the penis is extremely uncommon. To the best of our knowledge, only 23 cases in the literature have been reported to date.

Patients: We report a case of a 41-year-old man presenting with a painful mass on the dorsal base of the penile shaft. The pain was particularly severe during intercourse, with a pain scale rating of 7/10. Examination revealed a round, well-circumscribed, discrete lesion, confirmed on penile ultrasound to be an 8.7 millimeter solid nodule superficial to the tunica. Conservative management of the lesion failed to provide symptomatic improvement. Therefore, local excision was performed and histologic analysis showed it to be an epithelioid hemangioma.

Conclusion: Epithelioid hemangioma of the penis is a very rare benign vascular entity, and must be differentiated from epithelioid hemangioendothelioma and epithelioid angiosarcoma, two highly malignant neoplasms.

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CHRONIC ORCHIALGIA: INTEGRATIVE LITERATURE REVIEW

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Men with chronic orchialgia represent a small number of men evaluated in primary care, pain or urology clinics; it is poorly understood and represents an area of health disparity for men. The true incidence and prevalence of this condition is not known, but these men have commonly seen multiple providers, consistent with other chronic pain populations. The purpose of the integrated literature review was to describe what is currently known about men with chronic orchialgia and to identify gaps in this knowledge. A summary of studies since 1970 is presented, including their discussion of the characteristics chronic pain in these men. Recommendations for future research are suggested.

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PENILE SONOELASTOGRAPHY AND ITS ROLE IN CHARACTERIZATION OF LESIONS IN PATIENTS WITH PEYRONIE'S DISEASE

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Introduction: Sonoelastography is an emerging ultrasound-based technique that allows characterization of tissue stiffness. The aim of this report is to present cases of significant penile curvature that were characterized by sonoelastography.

Patients: Cases are presented of patients with findings consistent with Peyronie's disease including palpable and non-palpable

plaques, penile curvature and penile pain. All patients had physical examinations followed by pharmacostimulation of erection for B-mode and color Doppler evaluation. Shear wave sonoelastography was performed of the flaccid phallus. Shear wave sonoelastography was used to evaluate tissue stiffness in the corpora cavernosa and corpora spongiosa as well as the tunica albuginea.

Results: Sonoelastographic images demonstrated lesions of increased stiffness in two patients corresponding to the location of their plaques. In a third patient with curvature and without a palpable plaque or sonographically demonstrated lesion, an area of increased tissue stiffness was present at the site of maximal curvature.

Conclusion: Sonoelastography provides an additional way to characterize and localize lesions in patients with Peyronie's disease. It is particularly useful when palpation and B-mode ultrasonography have failed to demonstrate a plaque. It also localizes areas of increased stiffness for potential intralesional therapy. This modality warrants further study to characterize its ability to identify lesions and to establish a diagnosis of Peyronie's disease.

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A CASE OF EPITHELIOID HEMANGIOENDOTHELIOMA OF THE PENIS INITIALLY MISDIAGNOSED AS PEYRONIE'S DISEASE VS THROMBOSIS OF THE PENIS

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Background: We report the case of a 59-year-old male with epithelioid hemangioendothelioma of the penis who was referred to our institution from a community urologist after initially being diagnosed with thrombosis vs atypical Peyronie's disease. Epithelioid vascular tumors are uncommon neoplasm that predominately occur on the head and neck. Histologically these tumors are classified as either benign epithelioid hemangiomas or malignant epithelioid hemangioendothelioma (EHE) and epithelioid angiosarcoma. 17 cases of EHE of the penis have been reported in the literature; often with a clinical hx depicting a prolonged period of misdiagnosis with conditions such as Peyronie's disease or superficial penile vein thrombosis. No guidelines currently exist to guide management.

Diagnosis/Management: Initial evaluation in our urology clinic revealed a highly vascular mass superficial to the tunica on Color Doppler ultrasound. He was taken to the operating room for excisional biopsy of the suspicious lesion, which revealed a vascular tumor with plump endothelial cells and clusters of epithelioid neoplastic cells with abundant eosinophilic cytoplasm, absence of necrosis and mitotic figures, consistent with a low grade EHE. Follow up CT imaging was negative for evidence of metastatic disease. With his low risk pathological features, no further treatment was felt indicated at that time.

Conclusion: No clear association between histological course and clinical outcomes exists resulting in significant uncertainty as to the need for adjuvant therapies. Indeed several case reports have reported cure with only local excision even in the setting of recurrent disease. Given the uncertainty surrounding treatment, early clinical recognition is paramount so as to avoid prolonged periods of misdiagnosis.

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PREVALENCE OF NEPHROLITHIASIS AMONG PATIENTS WITH VASCULAR ERECTILE DYSFUNCTION

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Introduction: An association between erectile dysfunction (ED) and coronary artery disease has been reported. Related to this, nephrolithiasis (NL) has been linked to increased risk for myocardial infarction. Based on these findings, we hypothesized an association between NL and ED, particularly for ED with vascular pathophysiology (vED). Motivated by this, we explored the prevalence of patient-reported history of NL in men presenting to a urology clinic with vED.

Methods: Of 214 males who presented to Dept of Urology and screened SHIM (Sexual Health Inventory for Men) positive for ED, 121 were found to have abnormal pharmaco-penile Doppler ultrasonography (PDDU) (blood velocity <35 cm/s) confirming vascular insufficiency (vED). Of those, 59 completed a questionnaire which included a question about history of NL. We employed the binomial method to estimate the proportion (95% CI) of men with vED who reported a history of NL and paired t-tests to evaluate differences in age or PDDU between men with and without a history of NL.

Results: Sixteen of 59 patients with proven vED reported a history of NL (27%; 95% CI 15.7–38.3). We noted little difference in age (69±7 vs 66±10 y.o.) and PDDU (24±12 vs 26.5±13 cm/s) between those with and without NL. Of note, we observed no differences in vascular metrics or age between the 59 men who completed the questionnaire and the 62 who did not.

Conclusions: Herein, we estimate of the prevalence of NL in men with vED. More importantly, compared to reported historical series, our estimate is more than two-fold higher than expected among general adult male population. As such, our results suggest an association between vED and NL; however, larger, more focused investigations (i.e. case control studies) are warranted to validate this potential association.

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COEXISTENCE OF LOWER URINARY TRACT SYMPTOMS AND ERECTILE DYSFUNCTION IN A US PROSTATE CANCER SCREENING POPULATION

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Introduction: Lower urinary tract symptoms (LUTS) and erectile dysfunction (ED) often coexist and are common in aging men. Very little to date has been written about the association between LUTS and ED in a US prostate cancer screened population using validated measures. We sought to assess the prevalence and coexistence of LUTS and ED in this group of US men.

Materials and Methods: 4,841 men with a median age of 62 years (SD 10.5) were identified who participated in Prostate Awareness Weeks 2010 and 2011 sponsored by the Prostate Conditions Education Council. 73.3% of the cohort was White. All participants

completed an extensive screening questionnaire, which included assessment of ED using the Sexual Health Inventory of Men (SHIM) and LUTS using International Prostate Symptom Score (IPSS). ED was categorized as none, mild, mild-to-moderate, moderate, and severe based on the participant's SHIM score. LUTS were categorized as mild, moderate, and severe based on IPSS. We compared groups using Pearson's chi-squared test.

Results: Overall, 35.2% of participants reported at least mild-to-moderate ED. Among these 1703 men, 50.8% described their LUTS as mild, 39.8% as moderate, and 9% as severe. 721 (14.9%) men were categorized as having severe ED; 5.6% had severe LUTS. Of the 572 patients with severe LUTS, 58.8% reported at least mild-to-moderate ED. Amid the 41.3% of men who reported no ED only 2.6% reported severe LUTS.

Conclusion: To our knowledge, this is the largest and only US study looking at the coexistence of LUTS and ED in older men undergoing prostate cancer screening using validated measures. Our data suggest that severity of LUTS may correlate closely with severity of ED. Therefore, older men may benefit from concomitant screening for and treatment of both conditions.

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DO WE NEED TO CULTURE THE URETHRA AT THE TIME OF PENILE IMPLANTATION?

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Introduction: Identifying sites within the urinary tract that could serve as a nidus for infection in the penile implant patient reduces the risks associated with penile implant surgery: implant explantation, corporal fibrosis, penile shortening, risk of thromboembolism, penile gangrene, employment issues, as well as the 6 fold increase in the costs associated with treating infected implants. Risk factors for infection include: prednisone therapy, revision surgery, spinal cord injury, and diabetes (Wilson SK and Delk JR 2nd. J. Urol 1995; 153:659). Virtually every implant infection comes from direct contact with skin flora at surgery (Meunch PJ. J. Urol 2013; 189:1631). The bacterial contamination comes from the surgeon, OR team, and patient. Coagulase negative Staphylococcus accounted for 75% of infections, (most commonly, *S. epidermidis*). Less often (25%), *E. coli*, *Enterococcus*, *S. aureus*, *Serratia*, and *Pseudomonas* were responsible (Henry GD, Wilson DK, et al. J. Urol 1998; 159:1537). The urethra can harbor *S. epidermidis*, *E. coli*, and *Proteus mirabilis* and thus, be a source of implant infection (Todar K. Todar's Online Textbook of Bacteriology. U. Wisconsin 2006).

Patients and Methods: From 2007–2012, 66 men undergoing penile implant surgery underwent a urethral culture prior to inflatable penile implantation. These men had their medical comorbidities that might predispose them to infection, optimized. All men were pretreated with an oral quinolone for 3 days preoperatively. At surgery all received broad spectrum intravenous antibiotic therapy. With catheterization a urine c+s was obtained.

Results: all urethral and bladder cultures were negative.

Conclusion: In men undergoing penile implantation who have received preoperative antibiotics, urethral and bladder cultures are unnecessary and costly to a healthcare system.

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MANAGEMENT OF PRIAPISM SECONDARY TO LEUKEMIA BLAST CRISIS IN LEUKEMIA: REVIEW OF 2 CASES AT A SINGLE INSTITUTION

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Objectives: To examine the management strategies of priapism secondary to leukemic blast crisis.

Methods: We conducted a retrospective review of consecutive priapism cases at a single institution from January 2008 to June 2013. Characteristics including age, duration of erection were recorded. Patient were grouped by priapism etiology. Management strategies for priapism secondary to blast crisis in leukemia were then reviewed and analyzed.

Results: Of the 79 total cases of priapism, two cases were secondary to a leukemic blast crisis. One patient initially presented with 12 hours of painful priapism. Bloodwork revealed a WBC of 300K found to be Chronic Myelogenous Leukemia (CML) in Blast Crisis. The patient failed corporal irrigation/aspiration and phenylephrine administration. Emergent leukoreduction initially improved the leukocytosis without significant change in corporal rigidity. Imatinib and hydroxyurea reduced the erection to 30% by Day 4 of therapy. No further Urologic interventions were required. The second patient presented with a painful 2 hour erection with a WBC of 413K, also CML with Blast Crisis despite imatinib/hydroxyurea administration. Corporal irrigation without phenylephrine led to successful and sustained detumescence.

Conclusions: Priapism secondary to leukemic Blast Crisis is rare, comprising only 2.5% of our retrospective case review. Appropriate management requires consideration of acute hematologic needs, including leukopheresis and chemotherapy. Corporal irrigation was successful in one of the cases. Surgical shunting can be considered, but may be complicated by early leukostasis, followed by chemotherapy-induced leukopenia that could impair wound healing.

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SEXUAL FUNCTION IN SCHIZOPHRENIA

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Objective: This study surveys patients with schizophrenia or schizoaffective disorder, to understand the relationship between sexual function and treatment with antipsychotic medication. The study compares patients on single versus multiple antipsychotics as well differences between first and second generation agents.

Design and Methods: Patients diagnosed with schizophrenia or schizoaffective disorder at Beth Israel Medical Center are eligible. Once patients are evaluated to ensure they meet enrollment criteria and are consented, they are administered the Positive and Negative Syndrome Scale (PANSS), Abnormal Involuntary Movement Scale (AIMS), and either the International Index of Erectile Function for men, or the Female Sexual Function Index for women. Inclusion criteria include age 18–65, able to participate in a structured interview, fulfill DSM–IV criteria for Schizophrenia or Schizoaffective disorder, and on stable doses of one or more antipsychotic medications for at least six weeks. Exclusion Criteria

include patients taking Selective Serotonin Reuptake Inhibitors (SSRIs), and inability to provide informed consent.

Results: Presently, data suggests sexual function is impaired secondary to antipsychotic use. Further extrapolation of data is pending further enrollment.

Conclusions: Preliminary results point to better sexual function with certain second generation antipsychotics. It also appears that patients on single antipsychotic may have better sexual function than patients on multiple agents.

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USE OF INTERNET SEARCH QUERIES BY AMERICANS TO RESEARCH LOW TESTOSTERONE 2004-2013: WHAT THEY ARE LEARNING ONLINE

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Introduction: “Low testosterone (T)”, has been targeted for treatment by pharmaceutical companies with \$100 million advertising campaigns. Since the FDA allowed direct-to-consumer advertising in the late 90’s and the widespread adoption of the internet, patients have increasingly turned to the internet to research medical conditions. In this study, we examined U.S. search queries for diagnoses of and pharmaceutical treatments of “low T” over time and geographically. We then analyzed websites to see what treatment risks were discussed.

Methods: We used Google analytic tools to search for the volume of queries for variants of “low testosterone” and in parallel examined search strings for treatments (Androgel, T replacement, etc.). The results are scaled and normalized to reflect the variability in search traffic. We then identified websites that discussed both diagnosis and treatment and reviewed how many discussed the risks of testosterone replacement as outlined by the Endocrine Society of America.

Results: From Jan 2004 to June 2013, U.S. Google search queries for “low T” have increased 269%. Searches for treatments for “low T” have risen as high as 192% in 2012, and are now 79% higher than in 2004. Geographically, queries are higher in metropolitan areas and are clustered towards the South and Southeast. 1,070,000 websites were identified that discussed the diagnosis and treatment of low testosterone. 47.6% mentioned the risk of infertility, followed by prostate cancer (13.6%), breast cancer (8.1%), heart failure (6.5%), BPH (6.3%), elevated hct (5.7%), and sleep apnea (4.0%).

Conclusions: Consumers and patients are increasingly using the internet to research information on low testosterone, and the majority of websites do not discuss the risks associated with treatment.

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IS HYPOGONADISM ASSOCIATED WITH ARTIFICIAL URINARY SPHINCTER CUFF EROSION?

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Objectives: Although hypogonadism has been linked to various adverse sequelae including loss of libido, potency, muscle strength and lean body mass, its effect on urethral integrity is unknown. We hypothesized that low serum testosterone may be related to artificial urinary sphincter (AUS) cuff erosion.

Methods: We reviewed the charts of recent patients having an AUS explant for erosion at our institution. Available serum testosterone values and other clinical data were reviewed.

Results: Among 25 patients having AUS removal for cuff erosion from 2008–2013, testosterone levels were available for the last 8 consecutive patients (32%). Of the 8 men evaluated, 7 (88%) were dramatically hypogonadal, with an average serum testosterone level of 188 ng/dL (range 21–356; normal range 280–800). Average patient age was 72 (range 61–81). Three of the 8 (38%) had multiple episodes of AUS erosion, with an average time to erosion of 6 months (range 2–11). All patients had serum testosterone levels drawn within 6 months of their most recent explant, and 4 (50%) are now receiving testosterone replacement therapy.

Conclusion: While hypogonadism is a common geriatric urological problem, this initial investigation suggests a strong association with AUS cuff erosion. Further research is necessary to determine whether testosterone replacement may be beneficial for elderly men undergoing AUS placement.

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SERUM HORMONE PROFILES AS PREDICTORS OF ADAM QUESTIONNAIRE SCORES

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Introduction: We aim to define the ability of serum androgen and estrogen profiles to predict ADAM questionnaire scores.

Methods: We reviewed the records of patients with low serum testosterone (T) (defined by two early morning total T (TT) levels <300ng/dl), who completed the ADAM questionnaire. Hormone levels measured included TT, free T (FT), estradiol (E2), LH using a single laboratory. T/E ratios were calculated. Correlation coefficients were derived for TT, E2 and T/E ratio predicting (A) a positive ADAM score and (B) number of symptoms present (excluding ED). The logistic regression model included: patient age, TT, FT, E2, T/E ratio, number of vascular risk factors (VRF) (0–7), and presence of a varicocele.

Results: 188 patients with mean age = 49i,±26 years. Mean hormone levels were: TT 190i,±82 ng/dl, FT 46i,±16 pg/ml, E2 24i,±16 pg/ml, LH 2.5i,±2.0 IU/ml, T/E ratio 7.9i,±2 (1.7–26.9). There was no correlation between these levels and end-point A although patient age ($r=0.29$, $p=0.014$) and VRF status ($r=0.38$, $p<0.01$) were correlated. However, significant correlation for end-point B were found for: TT $r=0.12$, $p=0.035$ and T/E ratio $r=0.49$, $p<0.001$. The multivariable analysis defining predictors of end-point B are listed in the table.

Conclusion: Serum hormone levels correlate poorly with a positive ADAM questionnaire. Excluding ED from the definition increases the ability of these hormones to predict a positive questionnaire.

	OR	95 CI	p Value
T/E ratio <10	1.6	1.2-3.8	0.028
Presence of diabetes	2.6	1.8-5.9	<0.01
Patient age >60 years	3.2	1.9-11.1	<0.01

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COMPARISON OF TESTOSTERONE GEL AND SUBCUTANEOUS TESTOSTERONE PELLETS (TESTOPEL™) ON SEX STEROID HORMONE LEVELS IN HYPOGONADAL MEN

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Testosterone (T) gels and subcutaneous T pellets are common treatments for hypogonadism however their comparative effects on serum total T (TT), free T (FT), and estradiol (E2) have not been extensively studied. A retrospective review of 97 hypogonadal men treated first with T gel and later switched to T pellets was conducted. TT, FT and E2 levels were obtained at 3 time points – prior to gel initiation (baseline), 1–2 months after commencing gel therapy, and 1–2 months after 1st T pellet implantation. Mean time between baseline and post gel levels was 48.6 ± 32.2 days, between pellet implantation and post pellet levels 38.3 ± 18.4 days. Mean changes in TT, FT, and E were analyzed using repeated measures ANOVA. Mean patient age was 57.8 ± 10.9 years. Baseline TT level was 241.3 ± 93.5 ng/dl, FT 4.9 ± 2 ng/dl, E2 22.1 ± 14.2 pg/dl. Number of pellets implanted was 11.2 ± 1.3 . Post gel TT was 456.7 ± 217.9 ng/dl, FT 10.7 ± 6.9 ng/dl, E2 30.4 ± 21.6 pg/ml. Post pellet TT was 683.5 ± 208.8 ng/dl, FT 15.7 ± 5.3 ng/dl, E2 38.4 ± 24.1 pg/ml. 71/97 (73.2%) of patients remained on pellets at 1 year follow up. Treatment with either T gel or subcutaneous T pellets resulted in significant increases in TT, FT, and E2 levels relative to baseline. Treatment with T pellets resulted in a significantly larger increase in TT, FT and E2 levels compared with T gels 1–2 months after treatment.

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EFFICACY, SATISFACTION AND SAFETY OF TESTOSTERONE REPLACEMENT THERAPY (TRT) IN ELDERLY MEN

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Aim: To determine efficacy and satisfaction of elderly men (>65 y) men on TRT. We also evaluated the cardiometabolic and prostate cancer specific risks of TRT in this cohort.

Methods: Retrospective chart review was performed on 30 men > 65 y and 29 men younger than 65y on TRT. Treatment efficacy was evaluated using pre- and post-treatment serum testosterone, and satisfaction was assessed using ADAM and qADAM questionnaires. Lipid panels and adverse cardiovascular events were noted. Men with prostate cancer were excluded from analysis. Data are reported as medians, and Mann-Whitney test was used for statistical comparisons.

Results: The rise in total testosterone was similar in both men below 65y and above 65y (692 ng/dL vs. 308; $p = .10$). However, the increase in free testosterone was higher in younger men compared to men > 65y (14.1 ng/dL vs. 9.3; $p = .02$) despite similar changes in SHBG (-3.0 nmol/L vs. -2.0; $p = .49$). Younger men on TRT were more satisfied than older men as evidenced by lower ADAM scores (2 vs. 4; $p = .04$) and higher qADAM scores (37.5 vs. 31.5; $p = < 0.01$). The change in cardiometabolic risk profile between young and elderly men was similar: change in total cholesterol (-2.0 mg/dL, vs. -19.0; $p = 0.42$), LDL (-10.0 mg/dL vs. -6.0; $p = 0.95$), HDL (-3.0 mg/dL vs. -4.0; $p = 0.32$). There was one case of paroxysmal atrial fibrillation requiring cardioversion and ablation in a 67yo man. Change in PSA was similar between young and elderly men (0.25 ng/mL, vs. 0.13; $p = 0.37$).

Conclusion: Although men > 65y had similar increase in total testosterone compared to men < 65, they remain less satisfied on TRT. In the ambulatory setting, there was no cardiometabolic or prostate cancer specific increase in risks for older men on TRT

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URETHRAL FOREIGN BODIES IN THE POSTPUBERTAL PEDIATRIC POPULATION, SECONDARY TO URETHRAL SOUNDING FOR SEXUAL GRATIFICATION

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Introduction: The prevalence of urethral sounding for sexual stimulation is not well documented, but reported in up to 10% of certain populations. Retained urethral foreign bodies (UFB's) may result from this practice. Most cases have been reported in adults, rarely in pediatrics. We present, the largest case series of pediatric UFB's resulting from urethral sounding for masturbatory purposes. **Materials and Methods:** 4 different male patients of varying age, all post-pubertal, presented with UFB's, including air tubing for an aquarium, the cap of a pen, small gauge gas tubing, and the 2 arms of eyeglasses. None of the patients had a psychiatric history, and all reported urethral sounding for autoerotic stimulation. They presented to the emergency room in a delayed fashion (>24 hours), secondary to embarrassment, endorsing dysuria and/or obstructive urinary symptoms. Diagnosis was made using clinical history, physical examination, imaging studies, and/or endoscopic visualization of the foreign body.

Results: All 4 cases had attempted removal with cystoscopy and exam under anesthesia. Two of the cases required open extraction of the UFB's, via urethrotomy and cystotomy. Foley catheters were left in place postoperatively for a short period of time. The caretakers of all 4 refused psychiatric evaluation.

Conclusion: Most of what exists regarding UFB's is found in the adult literature. Recent publications suggest that the prevalence of UFB's in the pediatric population is increasing because of easier Internet access/exposure to non-conventional sexual practices. The diagnosis, work-up and treatment in this population have its differences and similarities when compared to the adults. Minimally invasive approach for removal should be attempted, but as in this series, is sometimes not possible.

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COMMON SEXUAL HEALTH CONCERNS AND ITS CORRELATION WITH FEMALE GENITAL ANATOMY

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Aim: To investigate the relationship between women's sexual health concerns and their pelvic organ prolapse quantification (POP-Q) score.

Methods: The chief complaints of women who visited a local sex clinic were analyzed relative to their anatomical findings by a retrospective chart review.

Main outcome measures: The 10 most common complaints were listed. Anatomical checkpoints, as part of the POP-Q, were measured during bimanual pelvic examinations of each subject by one experienced doctor.

Results: Difficulties in maintaining vaginal tightness, feelings of vaginal looseness during intercourse, slippage of the partner's penis out of the vagina during intercourse, vaginal flatulence during intercourse, back pain after intercourse, and lower abdominal discomfort during or after coitus were shown to be positively correlated with vaginal diameter. In contrast, urination or a sensation of urination during intercourse, difficulties in lubrication, and dyspareunia showed no correlation with the POP-Q score.

Conclusions: The POP-Q score reflects the disturbing symptoms in women during coitus

Key words: POP-Q, symptoms, coitus

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