Durasphere as New Agent for the Treatment of Hypermobile glans.

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Outline

- Relevant anatomy and physiology
- Defining hypermobile glans
- Goals of intervention
- The “How To” of Subcoronal Injection
- Outcomes and single institution retrospective data
Treatment Paradigm

Figure 3. Proposed treatment paradigm for hyxury glans syndrome.

(Bickell, et al., 2016)
New Treatment Paradigm

Distal penoplasty or glanulopexy and/or Durasphere bulking augmentation
Anatomy

("Penis Anatomy", 2016)

("The Penis - Human Anatomy", 2016)

(Bickell, et al., 2016)
(Clement, Giuliano, 2015)
(Yee & Baskin, 2010)
Physiology

(Lasker, Pankey, & Kadowitz, 2013)

("Sexual Response Cycle", 2016)
Glans Penis

- Is a sensory organ for sexual stimuli.
- Appropriate shape for vaginal dilatation and for easy introduction of the penis into the vagina.
- If the glans size is too small compared to a thicker shaft [or if true hypermobility exists] introduction is not as easy or effective.
- The cushion effects prevent both vaginal trauma and injury of the distal penis.

(Moon, Kwak, & Kim, 2015)
Hypermobile Glans

- Exists in the setting of properly sized and positioned implant
- Requires evaluation by an experienced prosthetic urologist
- Signs and symptoms:
  - Sensation of soft glans penis
  - Pain during intercourse due to cylinder tip pressure
  - Appearance of droopy glans penis with maximal inflation
Goal of intervention

- Stabilize glandular tissue
- Provide bulking “bumper” effect
- Recreate glandular engorgement
Prevalence of hypermobility

- Prosthetic erection does not include glanular tumescence

- 13-15% of partners quote soft or short glans as etiology of dissatisfaction

- Dissatisfied patients undergoing lipectomy, girth fat grafting, and glans injection report satisfaction

Prevalence of hypermobility

- In the 2015 JSM article Lledo-Garcia et al published their original research on 149 patients whom underwent either primary implantation or revision penile prosthesis surgery:
  - Reported an overall patient satisfaction rate of 79% and 80% respectively (very or moderately satisfied)
  - 74% and 80% of their partners reported satisfaction
  - However, there was a 13% and 15% rate for revision surgery of partners quoting softness or shortness of the glans as the main cause of their dissatisfaction.
Prevalence of hypermobility

- In the 2010 JSM article Shaeer published his experience with 18 patients whom reported dissatisfaction after 1 year of regular sexual practice after prosthesis implantation and met follow up and exclusion criteria:
  - 7 patients were satisfied after counselling.
  - 11 under went some combination of elongation with suprapubic lipectomy, girth enhancement with dermal fat grafting, or glans injection with polyacrelamide gel.
  - Reported 47.6% and 21% gains in length and girth respectively
Intraoperative Supplies

- (2) 17 Gauge Tuohy needles
- (2) 1 cc Durasphere injection syringes
- Sterile prep (chloraprep) and drape kit
- 4x4 Gauze
Subcoronal Injection

Post Injection
Subcoronal Injection

Pre-op Hypermobility

Bevel down to avoid tattooing glans

Post Injection
Results

- 16 patients, total of 61 injections (mean 3.6, range 2-8).
- 15 documented follow-up on average 50.5 weeks
- 86.6 % satisfaction rate
- Reduced or absent pain during intercourse, would do injection again, and subjectively improved stability.
Results

- 3 adverse events.
  - 2 minor
    - thinning of skin
    - ecchymosis and swelling of glans/penis
  - 1 necrotic glans wound
- All resolved with local wound care
Conclusions

- Durasphere has a safe history in treatment of ISD
- Our initial data suggests that similarly successful results are obtainable for glanular hypermobility

- We believe subcoronal Durasphere injections should be a viable option in the armamentarium of treatments for glanular hypermobility due to high patient satisfaction, ease of intervention, and low adverse events.
References

“If I have been able to see farther, it is because I have stood on the shoulders of giants.”

~ Sir Issac Newton