Transcorporal AUS placement in patients with prior IPP utilizing 6 ply acellular graft: A novel technique with resolution of climacturia

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Indications

- Patient with inflatable penile prosthesis with
  - Subcuff atrophy
  - Erosion of AUS cuff
  - History of radiation
  - Previous AUS revision
Subcuff Atrophy

• Treatment options
  – Cuff Downsizing
  – Tandem Cuffs
  – Transcorporal Cuff Placement
Transcorporal Cuff

- Preferred technique for distal cuff implantation
- Ideal for the high risk patient with history of previous AUS revision(s), radiation, and/or previous urethral surgeries
- Decreased risk of urethral injury given buttressing from tunica albuginea and corporal body tissue
- Can be performed with IPP in place
- 84% pts ≤ 1 ppd

Transcorporal Cuff with IPP

• Identifying the layer between the tunica albuginea and IPP pseudocapsule is technically challenging and generally not clinically feasible

• 6 ply acellular graft provides excellent separation between the AUS and IPP components and potentially adds to hemostasis
Our Series

• 3 patients ages 61, 74, and 80 years old
  • All with history of
    – Three or more previous urethral surgeries
    – Current functioning IPP
    – Subcuff atrophy after 3.5cm cuff placement
    – 2 of 3 with history of pelvic radiation

• Materials utilized
  – 6-ply acellular Maristem graft
  – AMS urinary control system
6 Layer Matrix Graft
Artificial Urethral Sphincter
Post Operative Care

• Patients are discharged home without a Foley
• 5 day course of antibiotics
• AUS activation 6 weeks post operatively
• No intercourse for 8 weeks but ok to cycle the IPP
Results

• 13.7 months average follow up
• Initial postop visit after activation all three patients noted
  – 0-1 pad per day
  – Excellent satisfaction
  – Resolution of climacturia
Result

• One patient with IPP malfunction 7 months postop from transcorporal AUS surgery
  – Explant, coporoscopy, reimplant of IPP
  – 1 month postop extrusion coporal cylinder, previous IPP culture + pseudomonas, enterococcus. Both AUS IPP explanted
  – Transcoproal AUS

• Another patient completely dry except for noted leakage with sitting on hard surfaces for prolonged periods
Conclusion

• Novel technique utilizing a transcorporal approach and acellular graft as a **salvage** surgical procedure for the complex incontinent male with current IPP

• Thus far, all urethral measurements have been 5.5cm leaving room for future downsizing if necessary

• Increased case duration and exposure of IPP components may increase risk of infection, therefore, a modified washout protocol is utilized

• Resolution of climacturia likely secondary to increased tissue compression from transcorporal AUS, acellular graft, and IPP components