PD61-11
Initial Experience of Holmium Laser Enucleation of the Prostate Following Previous Prostatic Urethral Lift for Management of Benign Prostatic Hyperplasia

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Disclosures

• Authors have no disclosures
Background

• Prostatic urethral lift (PUL)
  • AUA guidelines
    • <80 grams prostate and verified absence of obstructive median lobe
  • Outpatient, same-day procedure
  • Minimal sexual dysfunction
  • Surgical retreatment rates of 13.6% over 5 years (~2-3% per year)¹

Background

- Holmium Laser Enucleation of the Prostate (HoLEP)
  - Size-independent
  - Endoscopic
  - Uses morcellator
  - Safe, technically feasible, and efficacious as secondary procedure²


Objective

- Determine the incidence of patients receiving HoLEP as secondary procedure following previous PUL
- Assess benefits and challenges of HoLEP in these patients at our institution
Methods

• Retrospective review from January 2013 to January 2020
• 721 consecutive HoLEP cases identified in 701 patients
• All cases performed by a single surgeon (AD)
• Data collected included:
  • Demographics
  • Time between previous PUL and HoLEP
  • Pre-operative prostate size
  • Pre- and post-operative PVRs
  • Intra-operative challenges/complications
• Statistical test: t-test
Results

• 2.1% (15/721) of HoLEP cases involved patients with previous PUL
• Age range 64-80 years (mean=70.5 years, median=71 years)
• Time between previous PUL and HoLEP ranged from 2.8-48 months (mean=18.3 months, median=16.1 months)
• Pre-operative prostate size ranged from 32-180 grams (mean=93.1 g, median=92.2 g)
• Pre- and post-operative PVRs:
  • Pre-op: mean=255.9, SD=263.0
  • Post-op: mean=37, SD=29.6
    • p=0.0063
• Symptom relief in all patients following HoLEP
Results

- **Intra-operative challenges/complications**
  - 1 case
    - Large piece of calcified prostate tissue unable to be morcellated
    - Adenoma too large to remove using grasper or 10mm stone basket
    - Perc NCircle® nitonol tipless stone extractor (Cook Urological, Inc., Spencer, IN)
  - 1 case
    - Metallic tine of PUL prevented proper morcellation
    - Remaining calcified adenoma with tine too large (3-4cm) to remove per urethra
    - Long case time
    - Patient discharged home and returned in 7 days to retrieve remaining chip
      - Bipolar loop resection into smaller pieces
  - 1 case
    - Adherent bladder stone with submucosal tine in posterior bladder wall
    - Tine pulled and removed with graspers prior to initiating enucleation
    - Remaining 12 cases required morcellator instrument removal or the use of graspers
Images

UroLift cut during enucleation

UroLift tine caught in morcellator

Gross specimen of prostate tissue with UroLift tines and sutures
Conclusion

• HoLEP is safe and effective in PUL failure populations
  • Not without unique challenges:
    • Distorted prostate anatomy by PUL
    • Unintended location of PUL implants
    • Jamming of morcellator
  • Auxiliary maneuvers and techniques required to deal with tines
    • Graspers
    • Catch and release
  • Thorough discussion with patients considering PUL about management options


Thank You!

Questions or Comments?

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