





Anterior Urethral Valves – A Rare but Challenging Congenital Pathology

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Anterior Urethral Valves

- Anterior urethral valves (AUV) and associated anterior urethral diverticuli (AUD) are a rare cause of congenital lower urinary tract obstruction

Study Objective

- To evaluate the management and outcomes of patients with anterior urethral valves

Methods

- IRB-approved retrospective chart review (2002-2017)
- Patients undergoing transurethral ablation of anterior urethral valves

- Comparison population
  - Previously studied cohort of 104 posterior urethral valves (PUV) patients at our institution

Results (n = 8)

- Timing of diagnosis
  - Prenatal – 3
  - Neonatal – 3
  - Delayed – 2
- All underwent primary transurethral valve ablation
  - Laser – 1
  - Cold Knife – 4
  - Cautery – 3
- 50% with residual valves
  - All underwent repeat valve ablation
  - 2 required urethroplasty

Comparison to PUV cohort

- Need for repeat valve ablation
  - AUV patients - 50% (4/8)
  - PUV patients - 15% (16/104)

- CKD Progression
  - AUV patients – 12.5% (1/8) progressed to at least CKD Stage IIIA
  - PUV patients – 20.2% (21/104) progressed to stage IIIA
    8.6% (9/104) progressed to ESRD

Conclusions

- Due to the lower incidence of AUV patients, it is difficult to fully characterize these patients
- Majority of AUVs patients have a different phenotype and are diagnosed later compared to patients with PUVs
- However, patients with AUVs do seem to require more aggressive surgical treatment for complete resolution


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