Surgical Management of Lower Urinary Tract Symptoms Attributed to Benign Prostatic Hyperplasia

EVALUATION AND PREOPERATIVE TESTING

Recommended Evaluation
- Relevant medical history
- Assessment of LUTS
- Discussion of symptom severity and bother (AUA-SI)
- Physical examination

Some individuals found to have catheter-dependent urinary retention may have compromised detrusor function, and some are unlikely to benefit from surgery, though most with retention, CIC, and documented detrusor underactivity can still benefit from an outlet procedure. Those with acute and/or chronic renal insufficiency, refractory urinary retention, recurrent UTIs, bladder stones, or gross hematuria secondary to BPH are more likely to benefit from more aggressive interventional therapy.

Preoperative Testing
- Assessment of PVR
- Assessment of prostate size and shape

Additional Considerations
- Uroflowmetry
- Pressure flow studies

SURGICAL THERAPY

Assessment of Prostate Size

Large Prostate
- Simple Prostatectomy
- HoLEP
- ThuLEP
- TURP

Average Prostate
- HoLEP
- PVP
- PUL
- ThuLEP
- TUMT
- TURP

Small Prostate
- HoLEP
- PVP
- PUL
- ThuLEP
- TUMT
- TURP

Size Independent Options
- HoLEP
- ThuLEP

Eligible patients who desire preservation of erectile and ejaculatory function may be offered PUL or water vapor thermal therapy as data indicate that both therapies provide a greater likelihood of preservation of sexual function.

MEDICALLY COMPLICATED PATIENTS

In patients who are at higher risk of bleeding, such as those on anticoagulation drugs, therapies with a lower need for blood transfusion, such as HoLEP, PVP, and ThuLEP, should be considered. For additional information on the use of anticoagulation and antiplatelet therapy in surgical patients, refer to the ICS/AUA review on Anticoagulation and Antiplatelet Therapy in Urologic Practice.

1Eligibility for a PUL procedure is dependent upon absence of obstructing midline prostate tissue and prostate volume <80g
2Eligibility for a TURP procedure is dependent upon prostate volume <30g
3Eligibility for a Water Vapor Thermal Therapy procedure is dependent upon prostate volume <80g