BPH

Most common cause for visits to urologist’s office in men over 50

**Two Components of BPH Obstruction**

<table>
<thead>
<tr>
<th>Stromal</th>
<th>Glandular</th>
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<tbody>
<tr>
<td>“Dynamic” obstruction from smooth muscle stroma</td>
<td>“Static” obstruction from enlargement</td>
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<tr>
<td>Adrenergic control</td>
<td>Requires androgen (DHT)</td>
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<tr>
<td>Gland may not be palpably enlarged</td>
<td>Gland palpably enlarged</td>
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</tbody>
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**Symptoms**

- **Obstructive**
  - Hesitancy
  - Decreased stream
  - Interruption of stream
  - Dribbling, esp. terminal
  - Straining to void

- **Irritative**
  - Frequency
  - Nocturia
  - Urgency
  - Dysuria

Collectively, these sx are referred to as “LUTS”

In that “obstructive” symptoms can be caused by conditions other than obstruction, it is often (some say always) important to prove that obstruction exists:

1. **Cystoscopy:** Visualize obstruction and effects of obstruction (trabeculation, cellules etc.)
2. **Urodynamics (CMG):** High voiding pressure with low flow rate = Obstruction
3. Uroflow
4. Residual urine with discernment in each clinical situation.

**MEDICAL MANAGEMENT**

1. **Alpha-1 Blockers:** Address the dynamic component of obstruction.
   - 60+% significant improvement- and quickly
   - Older drugs require titration of dose, newer (tamulosin) do not
   - 10-15% intolerable side effects, e.g. dizzy, light headed, asthenia Postural hypotension
2. **Finasteride:** 5-alpha reductase inhibitor. Addresses static component.
   - Blocks conversion of testosterone to dihydrotestosterone.
   - Takes 6-12 months to act clinically
   - Decreases PSA by about 50%.
3. **Saw Palmetto Extract**

**SURGICAL MANAGEMENT**

**Indications** for surgical management:

1. Urinary Retention (intractable)
2. Renal failure d/t obstruction
3. Failure of medical management (including intolerable side effects)
4. Recurrent hematuria or UTI’s
5. Patient choice

**Surgical Procedures**

- **TURP:** The gold standard. Removes obstructing prostate tissue (adenoma)
- **TUIP:** Transurethral incisions for small obstructing glands
- **Open prostatectomy:** removes adenoma in very large glands
- **Laser**
  - Vaporization of tissue by holmium laser, similar in effect to TURP
  - Coagulation by YAG laser. Coagulated tissue has to slough out.

**OTHER HEAT BASED TREATMENTS**

- Hot water, microwave, high intensity ultrasound, radio waves. All of these are less invasive, but the jury is out re long term effectiveness.