BPH

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

Two Components of BPH Obstruction

Stromal

"Dynamic" obstruction from smooth muscle stroma

Adrenergic control

Gland may not be palpably enlarged

"Static" obstruction from enlargement
Requires androgen (DHT)

Gland palpably enlarged

Symptoms

"Obstructive""Irritative"HesitancyFrequencyDecreased streamNocturiaCollectively, these sx are referred to asInterruption of streamUrgency"LUTS"Dribbling, esp. terminalDysuriaStraining to void

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): <u>High</u> voiding pressure with <u>low</u> flow rate= Obstruction

3. Uroflow These latter two are totally non-specific but can be helpful if interpreted

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 <u>small</u> obstructing glands

Open prostatectomy: removes adenoma in very large glands

LASER

<u>Vaporization</u> 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.