

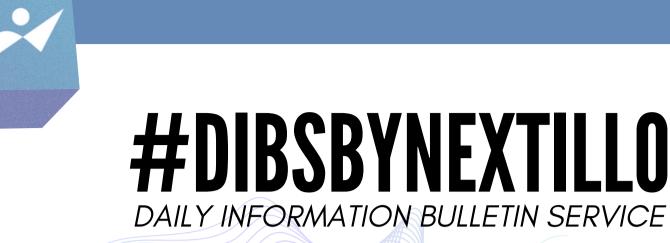


HUBBONIC CONTRACTOR OF THE OFFICE

DAILY INFORMATION BULLETIN SERVICE

BENIGN PROSTATIC HYPERPLASIA





BENIGN PROSTATIC HYPERPLASIA

Non-cancerous enlargement of the prostate gland, commonly affecting aging men.

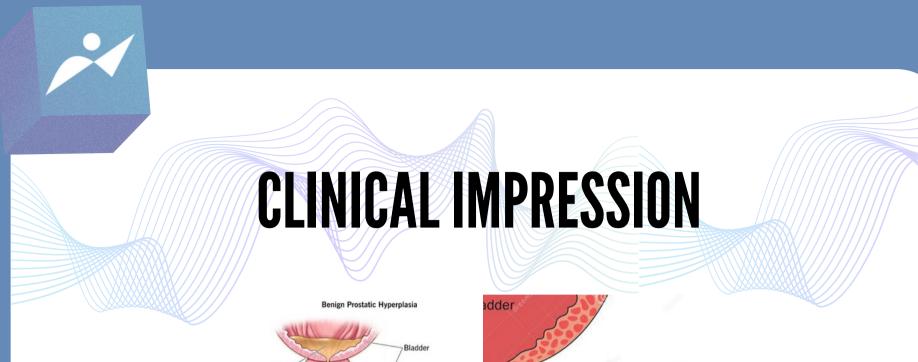
Hormonal Influence:

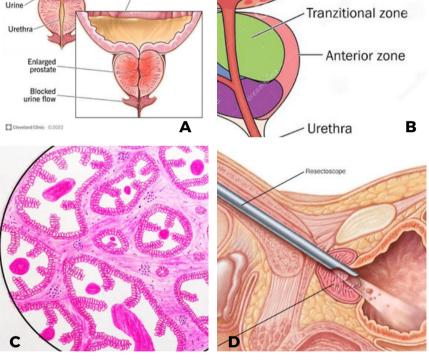
Age-related changes in hormone levels, especially an increase in dihydrotestosterone (DHT), contribute to prostate growth.

Cellular Proliferation:

Increased number of cells, particularly in the transitional zone of the prostate, leads to enlargement.







- A) Benign Prostatic Hyperplasia
- B) Zones of Prostate
- C) Hyperplastic Glands
- D) Transurethral Resection of Prostate (turp)



CLINICAL FEATURES

Lower Urinary Tract Symptoms (LUTS):

• Voiding Symptoms: Weak stream, Hesitancy, Straining during urination

Storage Symptoms:

- Increased frequency
- Urgency
- Nocturia

Complications:

- Acute Urinary Retention
- Urinary Tract Infections (UTIs)
- Bladder Stones
- Hematuria



DIAGNOSIS

Digital Rectal Examination (DRE):

Palpation of the prostate to assess size and consistency.

Prostate-Specific Antigen (PSA) Test:

Blood test to rule out prostate cancer.

Urinalysis:

To check for signs of infection or blood.

- Urodynamic Studies: Evaluates bladder function and urine flow. Normal if Qmax > 15 ml/sec. If Qmax < 10ml/sec : Suggestive of obstruction.
- **Transrectal Ultrasound (TRUS):** Provides detailed images of the prostate.
- **Cystoscopy:** Direct visualization of the urethra and bladder.

Grading (International Prostate Symptom Score - IPSS):

Quantifies the severity of symptoms and guides treatment decisions.



MANAGEMENT

Medications:

- Alpha-Blockers: Relax smooth muscle in the prostate and bladder neck.
- **5-Alpha Reductase Inhibitors:** Reduce DHT levels and shrink the prostate.
- Combination Therapy

Minimally Invasive Procedures:

• **Transurethral Microwave Therapy (TUMT):** Uses microwaves to shrink the prostate.

• **Transurethral Needle Ablation (TUNA):** Radiofrequency energy to alleviate symptoms.

Surgery:

• **Transurethral Resection of the Prostate (TURP):** Removal of excess prostate tissue.

• Laser Surgery: Uses laser energy to reduce prostate size.

• **Prostatic Urethral Lift (UroLift):** Implants to lift and hold the enlarged prostate tissue, improving urine flow.



BENIGN PROSTATIC HYPERPLASIA

Question :

Which medication class is commonly used to relax smooth muscle in the prostate and bladder neck for BPH management?

- A. Beta-blockers
- B. 5-Alpha Reductase Inhibitors
- C. Calcium channel blockers
- D. Alpha-blockers

Answer: D. Alpha-blockers

