# BENIGN PROSTATIC HYPERTROPHY (BPH) AND TREATMENT

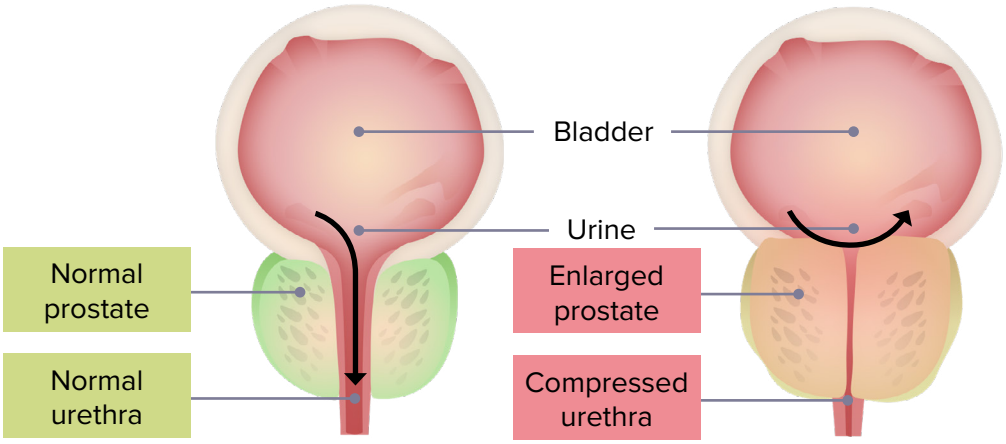
**Benign prostatic hypertrophy (BPH)** is the nonmalignant growth of prostate tissue. BPH increases in prevalence with age, affecting 50%–60% of men in their 60s and 70%–80% of men in their 80s.

**Other risk factors for BPH include:**

- Genetic predisposition
- Metabolic syndromes
- Hypertension
- Obesity

**Common symptoms:**

- Difficulty starting, stopping, maintaining urine stream
- Difficulty emptying bladder
- Urgency, frequency, nocturia




**Prostate enlargement leads to bladder outlet obstruction, with both static and dynamic components:**

| Static/mechanical | Dynamic |
|---|---|
| • Enlarged prostate tissue compresses urethra.<br>• Distortion of bladder outlet | • Increased tension in prostate smooth muscle<br>• Decreased elasticity in prostatic urethra |

## Pharmacologic Management

| 5-α-reductase inhibitors | α-1 adrenergic antagonists |
|---|---|
| **Drug names:** finasteride or dutasteride | **Drug name:** tamsulosin |
| • Shrinks prostate epithelial tissue<br>• Best for mechanical obstruction | • Relaxes smooth muscle in the prostate—prostate capsule, urethra, bladder neck (trigone & sphincter)<br>• Helps with dynamic obstruction |

Treatment is most effective when both classes of medication are used in combination therapy.

## Other Treatment Options

- Transurethral resection (TURP)
- Prostatectomy
- Laser anucleation (HoLEP)
- Urolift

## Client Education

Reducing caffeine and strategic timing of fluid intake may help manage urinary symptoms.

A-1 adrenergic antagonists have first-dose effect, which may decrease blood pressure during first 8 weeks of therapy (should be taken at bedtime during this period).

NOTES