NGN NCLEX 2026 · STUDY CARD

Benign Prostatic Hyperplasia (BPH)

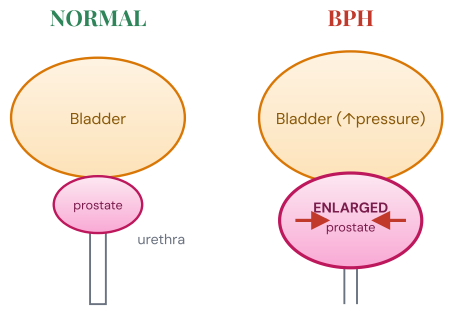
Non-cancerous enlargement of the prostate gland that compresses the urethra, producing lower urinary tract symptoms (LUTS). High-yield topic for pharmacology, prioritization, and post-operative TURP care.

System: Genitourinary | Pharm-heavy | Post-op focus (TURP) | NCJMM Integrated

1 Definition & Overview

- **Non-cancerous** (benign) hyperplasia of prostate gland cells → gland enlarges inward, compressing the urethra.
- Result: **bladder outlet obstruction** → LUTS, urinary retention, and ↑ risk of UTI / hydronephrosis / renal damage.
- BPH is **NOT** prostate cancer, but both can coexist. Screening still matters.

50+	~90%
TYPICAL AGE OF ONSET	MEN BY AGE 80 AFFECTED



state presses inward → urethra compressed → urine fl

NOT cancer · Age-related hormonal change (↑ DHT)

2 Pathophysiology (Simplified)

1. 👴 Aging + hormonal shifts (↑ DHT)
2. 🔬 Prostate cells hyperplasia → gland enlarges
3. 🚧 Urethra compressed → bladder outlet obstruction
4. 💧 Bladder works harder → hypertrophy, residual urine
5. 🚨 Retention → UTI, stones, hydronephrosis, AKI

3 Signs & Symptoms

OBSTRUCTIVE (Voiding)

- **Weak, dribbling stream**
- **Hesitancy** — hard to start
- **Straining** to void
- **Incomplete emptying**
- **Post-void dribbling**
- **Intermittent stream** (stops & starts)

IRRITATIVE (Storage)

- **Frequency** (bladder never empties)
- **Urgency**
- **Nocturia** — up multiple times at night
- **Dysuria** (if UTI develops)
- **Urge incontinence**

🚨 RED FLAGS

- **Acute urinary retention** EMERGENCY
- **Gross hematuria** with clots
- **Recurrent UTI** / fever / flank pain
- **Bladder distension** — suprapubic mass/pain
- **Hydronephrosis / ↑ BUN / creatinine**
- **Overflow incontinence** (leak from full bladder)

4 Priority Nursing Interventions

NCLEX PRIORITY — Safety & bladder decompression first — acute retention is a urologic emergency. Use bladder scan, catheterize as ordered.

Assessment & Monitoring

Assess voiding pattern: frequency, stream, hesitancy, nocturia.

Actions

Catheterize for acute retention (may need coudé tip — straight tip often fails with enlarged prostate).

Monitor I & O — track output vs intake; watch for < 30 mL/hr.

Drain bladder slowly — clamp after 1000 mL → wait → release to avoid vasovagal response / bleeding.

Bladder scan for post-void residual (PVR). >100 mL = concerning.

Administer meds (alpha blockers at bedtime — orthostatic risk).

Palpate suprapubic area for distension; assess for pain.

Encourage scheduled voiding, double voiding technique.

Monitor BUN, creatinine, PSA (rule out cancer; PSA may also ↑ in BPH).

Prepare/educate for procedures (TURP, laser, TUMT, open prostatectomy).

POST-OP TURP

Continuous Bladder Irrigation (CBI) — Key Points

EXPECTED DRAINAGE

Light pink / rosé. Titrate CBI rate fast enough to keep urine light pink & free of clots.

BRIGHT RED + CLOTS = HEMORRHAGE

Notify HCP immediately. Increase CBI, assess VS. **Do NOT take catheter out.**

IRRIGATION FLUID

0.9% Normal Saline ONLY (never sterile water — causes hemolysis & TURP syndrome).

TURP SYNDROME

Dilutional hyponatremia from absorbed hypotonic irrigant → confusion, HTN, bradycardia, seizures. Report immediately.

I & O

True output = total output - CBI amount infused. Document separately.

AVOID

Straining, rectal temps/enemas/suppositories, anticoagulants — all ↑ bleeding risk.

5 Pharmacology

Alpha-1 Adrenergic Blockers

RELAX SMOOTH MUSCLE · FAST RELIEF

EXAMPLES	MECHANISM	SIDE EFFECTS	NURSING
Tamsulosin (Flomax), Terazosin, Doxazosin, Alfuzosin, Silodosin	Relax smooth muscle in prostate & bladder neck → easier urine flow. Works in days.	**Orthostatic hypotension**, dizziness, "first-dose" syncope, retrograde ejaculation, nasal congestion	Give at **bedtime**. Rise slowly. Fall precautions. Monitor BP. Caution w/ PDE-5 inhibitors (additive hypotension).

5-Alpha Reductase Inhibitors

SHRINK THE PROSTATE · SLOW ONSET

EXAMPLES	MECHANISM	SIDE EFFECTS	NURSING

Finasteride (Proscar), Dutasteride (Avodart)	Block conversion of testosterone → DHT → prostate actually **shrinks**. Takes **3–6 months**.	↓ libido, ED, ↓ ejaculate volume, gynecomastia. **Lowers PSA by ~50%** (factor into cancer screening).	**TERATOGENIC.** Pregnant women must NOT touch crushed/broken tablets or handle semen of patient. Wear gloves. Adherence essential — effects reverse if stopped.

PDE-5 Inhibitors

DUAL BPH + ED · LOW-DOSE DAILY

EXAMPLE	MECHANISM	SIDE EFFECTS	NURSING
Tadalafil (Cialis) — approved for BPH	Relaxes smooth muscle in prostate/bladder neck via cGMP pathway.	Headache, flushing, back pain, dyspepsia, priapism (>4h = ER)	**NEVER with nitrates** — life-threatening hypotension. Caution w/ alpha blockers.

Drugs to AVOID in BPH (worsen retention)

- **Anticholinergics** — oxybutynin, diphenhydramine (Benadryl), TCAs, atropine
- **Antihistamines (1st gen)** — Benadryl, hydroxyzine
- **Decongestants** — pseudoephedrine, phenylephrine (constrict bladder neck)
- **Opioids** — can cause urinary retention

6 NCLEX Test Traps

TRAP 1

BPH ≠ Prostate Cancer

Both cause urinary symptoms & ↑ PSA. **Symptoms alone can't distinguish them.** Diagnosis requires biopsy. Finasteride artificially lowers PSA by ~50%.

TRAP 2

First-Dose Syncope (Tamsulosin)

Students forget **orthostatic hypotension = a safety issue**. Always answer: give at bedtime, rise slowly, fall precautions. This beats "monitor urine output."

TRAP 3

CBI: Bright Red + Clots

❌ Students stop the irrigation. ✅ Correct: **increase CBI rate**, assess VS, notify HCP. Stopping lets clots form and occlude.

TRAP 4

Finasteride + Pregnancy

Teratogenic to male fetus. **Pregnant women must NOT handle** broken tablets. Patient must also use condoms during intercourse — key education point.

TRAP 5

Post-TURP: Rectal Temps FORBIDDEN

No rectal temps, enemas, or suppositories after prostate surgery — risk of hemorrhage. Students often miss this on "safe delegation" questions.

TRAP 6

TURP Syndrome ≠ Infection

Confusion + HTN + bradycardia + nausea after TURP = **dilutional hyponatremia** from absorbed irrigant. Check sodium — not antibiotics.

TRAP 7

Clamping Retention Catheter

On acute retention with huge bladder volume → drain slowly in increments. Emptying all at once = hypotension, hematuria, vasovagal.

TRAP 8

Cold & Allergy Meds

OTC cough/cold products contain decongestants + antihistamines — both cause urinary retention. Patient must read labels.

7 Patient Education

- **Void on schedule** (every 2–3 hrs); try double-voiding to empty bladder fully.
- **Limit fluids after dinner** to reduce nocturia; still drink 1.5–2 L total/day unless restricted.
- **Avoid caffeine & alcohol** — both irritate bladder and worsen urgency/frequency.
- **Read OTC labels** — avoid decongestants (pseudoephedrine) and antihistamines (Benadryl).
- **Take tamsulosin at bedtime**; rise slowly to prevent orthostatic syncope and falls.
- **Finasteride takes 3–6 months** to work; don't stop just because symptoms linger.
- **Pregnant partners** must not touch crushed Finasteride; use condoms during therapy.
- **Stay active**; prolonged sitting, cold, and stress can trigger acute retention.
- **Go to ER** if unable to urinate, severe pain, fever, or blood with clots in urine.
- **Annual follow-up** — DRE, PSA, symptom score (IPSS) to track progression.

8 Memory Boosters

LUTS MNEMONIC

FUN WISE

F	U	N	W	I	S	E
Frequency	Urgency	Nocturia	Weak stream	Incomplete empty	Straining	dribblE / hesitancy

DRUG-CLASS HOOK

"—OSIN relaxes" "—IDE shrinks"

Drugs ending in **-osin** (tamsu**losin**, doxaz**osin**) → alpha blockers, **relax** prostate smooth muscle (fast).

Drugs ending in **-ide** (finaster**ide**,

dutaster**ide**) → 5-alpha reductase inhibitors, **shrink** the gland (slow, 3–6 mo).

🎯 Pattern-Recognition Cheats

- **Flomax = Flow Max** — opens the flow (alpha blocker).
- **"Rise slow, or you'll blow"** — remember orthostatic drop with alpha blockers.
- **Pink = Think** (good), **Red = Dread** (hemorrhage) for CBI urine color.
- **TURP → No NO's:** No rectal thermometer, No enemas, No straining.
- **TURP Syndrome = "Water intoxication of the OR"** — think dilutional Na^+ ↓.
- **Finasteride = Fin + side**: it cuts DHT (like a fin slicing) — and must be kept far from pregnant women.

9 NCJMM Clinical Judgment Framework

1	2	3	4	5	6
Recognize Cues	**Analyze Cues**	**Prioritize Hypotheses**	**Generate Solutions**	**Take Action**	**Evaluate Outcomes**
Weak stream, nocturia, distended bladder, ↑ PSA, ↑ residual on scan.	Obstructive vs irritative LUTS. Rule out retention, UTI, AKI. Consider cancer.	Acute retention → emergency. Chronic LUTS → med mgmt. Post-op TURP → bleeding/TURP syndrome.	Catheterize, bladder scan, alpha blocker, 5-ARI, CBI protocol, education on OTCs.	Decompress bladder (slow), give meds at right time, monitor CBI color & Na^+, fall precautions.	Urine output restored, clear/pink urine, Na^+ WNL, IPSS score ↓, no falls, patient verbalizes teaching.