🫁 GENITOURINARY SYSTEM

Urinary Retention

The inability to fully empty the bladder — a silent emergency that can damage kidneys

NGN NCLEX 2026 • HIGH-YIELD

1 Definition & Overview

🚨 Acute Retention

Sudden, **painful** inability to void. A medical emergency requiring immediate intervention (bladder scan → catheterization).

⏳ Chronic Retention

Gradual, often **painless**. Bladder slowly stretches; patient may void small amounts frequently but never fully empties.

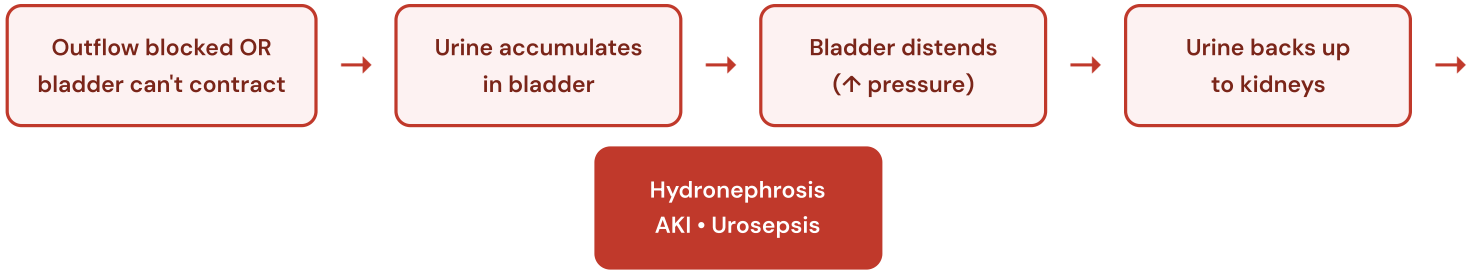
🔪 Why It Matters

Unrelieved retention → hydronephrosis → UTI → urosepsis → **acute kidney injury**. Early recognition prevents renal damage.

🎯 Normal Voiding

Adult bladder holds ~400–600 mL. Normal residual after voiding: **<50 mL**. Residual >100 mL is abnormal.

2 Pathophysiology (Simplified)



4 Root Causes (Memorize!)

Obstructive
BPH, stones, stricture, tumor, clot, fecal impaction

Neurogenic
Spinal cord injury, MS, stroke, diabetic neuropathy

Pharmacologic
Anticholinergics, opioids, antihistamines, TCAs

Post-op / Functional
Anesthesia, pain, immobility, pelvic surgery

3 Signs & Symptoms

⚠️ EARLY / MILD

- Hesitancy (difficulty starting stream)
- Weak or intermittent stream
- Sensation of incomplete emptying
- Urinary frequency & urgency
- Post-void dribbling
- Small-volume voids (<240 mL per void)
- Nocturia

🚨 LATE / SEVERE (RED FLAGS)

- 🚨 **Palpable, distended bladder** above pubic symphysis
- 🚨 Suprapubic pain & pressure
- 🚨 No urine output × 6–8 hrs post-op
- 🚨 Urine output <30 mL/hr
- 🚨 **Overflow incontinence** (constant dribble)
- 🚨 Restlessness, diaphoresis, anxiety
- 🚨 Rising BUN/creatinine (AKI)
- 🚨 **Autonomic dysreflexia** in SCI (HTN + bradycardia + HA)

4 Priority Nursing Interventions

PRIORITY #1 • ASSESS

Bladder Scan First

Non-invasive measurement of residual volume. Scan BEFORE catheterizing. Residual >400 mL typically warrants catheterization.

ASSESS

Palpate & Inspect

Palpate suprapubic area for distended bladder. Check for bulge above symphysis pubis. Percussion = dull tone.

MONITOR

Strict I & O

Expect ≥30 mL/hr in adults. Record time/amount of every void. Watch for small, frequent voids = overflow.

INTERVENE

Catheterize Cautiously

Straight cath for acute relief. Drain NO more than **750–1000 mL at once** to prevent bladder spasm, hemorrhage, and hypotension.

PROMOTE

Non-Invasive Voiding Tactics

Privacy, upright position, run warm water, pour warm water over perineum, warm bedpan, ambulate if possible.

MONITOR

Post-Obstructive Diuresis

After catheterization, monitor for massive urine output (>200 mL/hr). Risk: dehydration & electrolyte imbalance.

SAFETY

Review Medication List

Identify and flag retention-causing drugs (anticholinergics, opioids, antihistamines) — notify provider.

EMERGENCY

SCI + HTN = Dysreflexia

🚨 Elevate HOB immediately → check bladder (full?) → check bowel → notify provider. Do NOT lay flat.

5 Pharmacology

💊 Drugs That TREAT Urinary Retention

DRUG / CLASS	MECHANISM	KEY SIDE EFFECTS	NURSING PEARLS
Tamsulosin (Flomax) *Alpha-1 blocker*	Relaxes prostate & bladder neck smooth muscle → easier flow	Orthostatic hypotension, dizziness, **first-dose syncope**, retrograde ejaculation	Give at bedtime. Rise slowly. Hold if SBP <90.
Finasteride (Proscar) *5-α reductase inhibitor*	Shrinks prostate over 3–6 months	↓ libido, ED, gynecomastia	**Pregnancy Category X** — pregnant women must NOT handle crushed tabs (teratogenic).
Bethanechol (Urecholine) *Cholinergic*	Stimulates bladder detrusor muscle contraction	SLUDGE: Salivation, Lacrimation, Urination, Diarrhea, GI upset, Emesis; bradycardia, bronchospasm	⚠️ **CONTRAINDICATED in obstruction** (bladder ruptures!). Give on empty stomach. Antidote: atropine.

⚠️ Drugs That CAUSE Retention (Hidden Culprits)

Always review the MAR first — medication is the #1 reversible cause:

- Anticholinergics (atropine, oxybutynin)
- Opioids (morphine, codeine, fentanyl)
- Antihistamines (diphenhydramine)
- TCAs (amitriptyline)
- Decongestants (pseudoephedrine)
- Antipsychotics
- Anesthesia agents

6 NCLEX Test Traps ⚠️

🎭 **Overflow incontinence ≠ "just incontinence."** Constant dribbling in a patient who "can't void" = RETENTION. Do NOT restrict fluids — catheterize and scan.

💦 **Never drain >1000 mL at once.** Rapid decompression causes bladder wall hemorrhage, hypotension, and shock. Clamp briefly, then resume.

🔍 **Bladder scan BEFORE catheter — always.** NCLEX prefers the least invasive action first. Scan → confirm → cath.

🚫 **Bethanechol is contraindicated in obstruction.** Stimulating a blocked bladder = rupture. Always rule out obstruction first.

⏰ **Post-op void expectation: within 6–8 hours.** No void by 8 hours post-op → bladder scan → notify provider.

❓ **Retention ≠ Anuria.** Retention = urine made but trapped. Anuria = kidneys not making urine. Bladder scan distinguishes them instantly.

🧍 **SCI + sudden HTN + headache + bradycardia = Autonomic Dysreflexia.** SIT the patient UP first (reverse Trendelenburg), then check bladder/bowel. Do NOT lower the HOB.

💧 **Small frequent voids can still mean retention.** Patient voiding 50 mL every hour may have 600 mL residual. Scan to confirm.

7 Patient Education

1. **Scheduled voiding** every 2–4 hours (don't wait for the urge).
2. **Double-void technique:** void, wait 2–3 minutes, attempt again.
3. **Credé maneuver** (gentle suprapubic pressure) — only if provider approved (NOT in obstruction).
4. **Kegel exercises** to strengthen pelvic floor.
5. **Fluids 1500–2000 mL/day** unless CHF/CKD restriction.
6. **Avoid bladder irritants:** caffeine, alcohol, carbonated drinks, artificial sweeteners.
7. **Avoid OTC anticholinergics** (Benadryl, cold meds) — they worsen retention, especially with BPH.
8. **Report immediately:** inability to void, suprapubic pain, fever, chills, or blood in urine.

8 Memory Boosters 🧠

🔑 Mnemonic: "DRIP" — Acute Retention Causes

D	R	I	P
Drugs (anticholinergics, opioids)	Retention from obstruction (BPH, stones)	Infection / Impaction	Prostate / Post-op / Psychogenic

💡 Mnemonic: "RETAIN" — Risk Factors

R	E	T	A	I	N
Residual urine history	Enlarged prostate (BPH)	Trauma / Surgery	Anticholinergics / Anesthesia	Infection (UTI)	Neurogenic bladder

<50 mL Normal post-void residual	**>400 mL** Typically catheterize	**1000 mL** Max drained at once
6–8 hrs Post-op void window	**30 mL/hr** Minimum expected output	**SIT UP** First action in dysreflexia

9 NCJMM Clinical Judgment Framework

🔍 RECOGNIZE CUES

- Hesitancy, weak stream, dribbling
- Distended, palpable bladder
- Suprapubic pain & pressure
- Output <30 mL/hr
- Restlessness, diaphoresis

🧩 ANALYZE CUES

- Retention vs anuria vs AKI?
- Obstructive vs neurogenic cause?
- Review MAR for offending drugs
- Check post-op voiding timeline
- Assess for SCI / dysreflexia

🎯 PRIORITIZE HYPOTHESES

- #1: Complete obstruction (emergency)
- #2: Pharmacologic cause (reversible)
- #3: Post-op/functional cause
- #4: Chronic neurogenic bladder

💡 GENERATE SOLUTIONS

- Non-invasive voiding measures first
- Bladder scan for residual volume
- Straight cath vs indwelling
- Medication review / d/c offenders
- Consider alpha-blocker therapy

⚡ TAKE ACTION

- Bladder scan → document residual
- Catheterize (drain ≤1000 mL)
- Notify provider for retention
- Strict I & O documentation
- Position upright, privacy, warm water

✅ EVALUATE OUTCOMES

- Bladder empty / residual <50 mL
- Urine output >30 mL/hr
- No suprapubic pain or distension
- Stable vital signs
- BUN/creatinine trending down

NGN NCLEX 2026 Prep Series • Urinary Retention Infographic

Built for clinical judgment • Aligned with NCJMM • High-yield review