# evidence based guidelines

## **ACUTE URINARY RETENTION**

### **Definition**

Acute urinary retention exists if one of the following is true:

- It has been over 8 hours of no urinary output (especially if patient is post-surgical)
- The patient has the sensation of needing to void but is unable to do so
- The patient is having symptoms of overflow incontinence (leaking, dribbling, sensation of incomplete void, stopping/restarting void, suprapubic fullness, etc.)

## **Management**

- 1) Attempt to reduce or remove possibly offending medications:
  - Spinal or epidural anesthesia
  - Medications with anti-cholinergic properties:
    - tri-cyclic anti-depressants (amitriptyline, anafranil, clomipramine, imipramine, nortriptyline)
    - o first generation antihistamines (hydroxyzine, chlorpheniramine, diphenhydramine, meclizine)
    - o anti-spasmotics (dicyclomine hyoscyamine, oxybutynin, tolterodine)
    - o antipsychotics (benztropine, chlorpromazine, clozapine, olanzapine)
    - o **muscle relaxers** (cyclobenzaprine, orphenadrine)
    - o **nausea medications** (prochlorperazine, promethazine, scopolamine)
  - Opiate medications
  - Calcium channel blockers
  - Benzodiazepines
- 2) Increase activity/ambulation
- 3) Correct constipation if present
- **4)** For post-surgical or hospitalized patients: perform a non-invasive bladder ultrasound (bladder scan). Perform a one-time bladder catheterization ("straight cath") for the following patients:
  - a) Bladder volume ≥500 ml and patient is symptomatic (painful, nauseous, overflowing urine, etc)
  - b) Bladder volume ≥800 ml and patient is asymptomatic
  - If the bladder volume is less than the catheterization threshold, a warm compress on the suprapubic region, ambulation, or upright position may allow some patients to void spontaneously
  - If bladder volume is very low, consider volume depletion, third-spacing, or renal failure
  - If the patient is requiring a third catheterization, place an indwelling catheter and proceed to #6.
- 5) For outpatient/ER patients: Perform a bladder scan or attempt a bladder catheterization. If volume is 500ml or greater, leave bladder catheter in place for 2-3 days and proceed to #6 below.
- 6) If an indwelling catheter has been placed:
  - a) Consider starting the patient on tamsulosin 0.4mg thirty minutes after food once daily.
  - b) Attempt removal of the catheter after 2-3 days (this is best done early in the day so failure to void can be managed during business hours)
  - c) If the patient fails to spontaneously void, replace an indwelling catheter and refer non-urgently to urology\*.

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#### **APPROVED BY:**