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)
  - **first generation antihistamines** (hydroxyzine, chlorpheniramine, diphenhydramine, meclizine)
  - **anti-spasmotics** (dicyclomine hyoscyamine, oxybutynin, tolterodine)
  - **antipsychotics** (benztropine, chlorpromazine, clozapine, olanzapine)
  - **muscle relaxers** (cyclobenzaprine, orphenadrine)
  - **nausea medications** (prochlorperazine, promethazine, scopolamine)
- Opiate medications
- Non-steroidal anti-inflammatories (NSAIDS)
- Calcium channel blockers
- Benzodiazepines

2) Correct constipation if present

3) 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 #5.

4) 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 #5 below.

5) 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*.

*West Michigan Urology: 616-392-1816

holland pho
Physician Hospital Organization

APPROVED BY:
Quality & Care Management Committee,
Holland Physician Hospital Organization
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