Urinary Incontinence

Medical Student case-based learning
64 year old woman presents with a 3 year history of urinary incontinence

What are the most common types of urinary incontinence?
Types of incontinence

• Urgency incontinence
  – Involuntary loss of urine associated with urgency, which is the sudden, compelling desire to void which is difficult to defer.
• Stress incontinence
  – Involuntary loss of urine on effort or physical exertion
• Mixed incontinence
  – Leakage associated with both urgency and physical exertion
• Overflow incontinence
  – Leakage which occurs due to incomplete bladder emptying
Patient reports both loss of urine with urgency and leakage with cough and lifting

What is the strategy for initial evaluation?
Evaluation of incontinence

• **History**
  – Characteristics of incontinence (stress, urge, pad use)
  – Comorbid conditions
  – Medications
  – Prior surgeries

• **Physical**
  – Pelvic organ prolapse
  – Stress incontinence on exam
  – Brief neurologic survey

• **Laboratory**
  – Urinalysis: rule out infections, hematuria

• **Functional studies**
  – Post-void residual measurement may be helpful
  – Urodynamics may be reserved for complex cases or in planning invasive interventions
What are some transient causes of incontinence that may be readily reversible?
Reversible causes: DIAPPERS

- Delirium
- Infection
- Atrophic vaginitis
- Pharmacologic
- Psychological
- Excessive urine production
- Restricted mobility
- Stool impaction
What are some common treatments for urgency incontinence?
Treatment of urgency incontinence

- Behavioral interventions
  - Timed voiding
  - Fluid management
  - Avoidance of bladder irritants
- Pelvic floor physical therapy
- Pharmacologic agents
  - Anticholinergics
  - Beta 3 adrenergic receptor agonists
- Third-line therapy
  - Botox
  - Percutaneous tibial nerve stimulation
  - Sacral neuromodulation
Our patient demonstrates both urgency and stress incontinence. Her symptoms and exam are consistent with primary stress leakage. What are some common treatments for stress incontinence?
Treatment of stress incontinence

• Behavioral interventions
  – Timed voiding
  – Fluid management
• Pelvic floor physical therapy
• Weight loss
• Pessaries
• Urethral bulking agents
• Surgical therapies
  – Retropubic suspensions
  – Midurethral synthetic sling
  – Pubovaginal sling
Indications for further evaluation

Further functional studies with urodynamics are indicated for patients who have undergone prior pelvic surgery, have a suspected neurologic component to their incontinence, or have mixed symptoms refractory to conservative or medical management.
References and further reading


