

Urinary Incontinence

Medical Student case-based learning



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**64 year old woman presents with a 3 year history
of urinary incontinence**

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



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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?



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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



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What are some transient causes of incontinence that may be readily reversible?



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Reversible causes: DIAPPERS

- Delirium
- Infection
- Atrophic vaginitis
- Pharmacologic
- Psychological
- Excessive urine production
- Restricted mobility
- Stool impaction



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What are some common treatments for urgency incontinence?



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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



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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?



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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



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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.



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References and further reading

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