
Urinary Incontinence (See Chap. 11)

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Types of urinary incontinence

Type	Definition
Stress	Involuntary loss of urine (only small amounts) with increasing intra-abdominal pressure (e.g. coughing, laughing, jumping and others)
Urge	Leakage of urine (rather large volumes lost) because of inability to delay voiding after sensation of bladder fullness
Overflow	Leakage of urine (small amounts) caused by either mechanical forces on an overextended bladder (stress leakage) or other effects of urinary retention on bladder and sphincter function (contributing to leakage)
Functional	Urinary accidents associated with the inability to toilet because of impairment of cognitive and/or physical functioning, psychological unwillingness or environmental barriers

“Red Flags” in patients with urinary incontinence

History	Clinical signs	Laboratory measures
Persistent urinary tract infections	Sudden loss of urine	Haematuria
Persistent back pain	Sudden change in personal behaviour	Poor renal function
Recent pelvic fracture	Acute confusion/delirium	
Recent back trauma		
Prostatic hyperplasia		

Potentially reversible conditions leading to urinary incontinence: “DIAPERS”:

D elirium
U rinary infection
A trophic vaginitis
P harmaceuticals/side effects
P sychological condition
E xcess fluid in/out—recommend no fluid intake in the evening
R estricted mobility
S tool impaction

Drugs inducing incontinence	Clinical effects
Alpha-adrenergic agonists	Increase smooth muscle tone, urinary sphincter + prostatic capsule increase residual volume—overflow incontinence
Alpha-blocker (doxazosin, prazosin, tamsulosin)	Relax urinary sphincter and urethra, may cause stress incontinence, e.g. when coughing, lifting objects
Angiotensin-converting enzyme inhibitors	Can worsen stress incontinence by inducing repetitive coughing
Anticholinergic drugs	May cause impaired emptying, urinary retention, infection, constipation, reduce effective toileting ability, dizziness, confusion, falls, dry eyes, dry mouth and induce increase fluid intake, dose-dependent effect
Calcium channel blockers	Smooth muscle relaxants, may cause impaired emptying, urinary retention (overflow incontinence) and constipation
Cholinesterase inhibitors	Increase bladder contractility/urgency UI (dose-dependent effect)
Diuretics—furosemide, thiazide	Increase urine production—symptoms of urinary urgency increase
Gabapentin	Oedema, nocturnal polyuria
Lithium	Polyuria due to diabetes insipidus
Opioids/morphine	May cause urinary retention, constipation, confusion, immobility, all of which can contribute to UI
Sedatives, hypnotics, antipsychotics	Anticholinergic side effects: confusion, dizziness, immobility, decreasing detrusor contractility—urinary retention
Selective serotonin reuptake inhibitors	Increase cholinergic activity—and bladder contractility