Medication that can affect continence in older persons

|  |  |  |
| --- | --- | --- |
| **Medication Class** | **Examples** | **Effect on continence** |
| Alpha adrenergic agonists | ephedrine (in some OTC cold medications)  salbutamol (for asthma)  dobutamine (for cardiogenic shock, severe HF)  epinephrine/adrenalin | Increase smooth muscle tone in urethra and prostatic capsule and may precipitate obstruction, urinary retention, and related symptoms |
| Alpha adrenergic antagonists | tamsulosin (Flomax)  doxazosin (Cardura)  prazosin (Minipress) | Decrease smooth muscle tone in the urethra and may precipitate stress urinary incontinence in women  tamsulosin – postural hypotension |
| Angiotensin converting enzyme inhibitors | ramipril (Altace)  enalapril (Vasotec)  Lisinopril (Prinivil) | Cause cough that can exacerbate UI |
| Anticholinergics | Many drugs have anticholinergic side effects (dry mouth, flushing, urinary retention, constipation, confusion)  bladder antimuscarinics:  oxybutynin (Ditropan)  fesoterodine (Toviaz)  solifenacin (Vesicare)  tolterodine (Detrol) | May cause impaired emptying, urinary retention, and constipation that can contribute to UI. May cause cognitive impairment and reduce effective toileting ability. |
| Calcium channel blockers | amlodipine (Norvasc)  diltiazem (Cardizem)  nifedipine (Adalat) | May cause impaired emptying, urinary retention, and constipation that can contribute to UI. May cause dependent lower limb edema which can contribute to nocturnal polyuria. |
| Cholinesterase inhibitors | donepezil (Aricept)  rivstigmine (Exelon)  galantamine (Reminyl, Razadyne) | Increase bladder contractility and may precipitate urgency UI  May cause loose stools initially |
| Diuretics | furosemide (Lasix)  hydrochlorothiazide  indapamide | Cause diuresis and precipitate UI |
| Lithium | lithium | Polyuria due to diabetes insipidus |
| Opioid analgesics | Codeine  Morphine  Hydromorphone (Dilaudid) | May cause urinary retention, constipation, confusion, and immobility, all of which can contribute to UI |
| Psychotropic drugs Sedatives Hypnotics  Antipsychotics  Histamine1 receptor antagonists | Sedative/Hypnotics  zolpidem (Ambien)  Antipsychotics  Olanzapine (Zyprexa)  Quetiapine (Seroquel)  Risperidone (Risperdal)  H1 receptor antagonist  Promethazine | May cause confusion and impaired mobility and precipitate UI  Anticholinergic effects  Confusion |
| Selective serotonin re-uptake inhibitors | citalopram (Celexa)  paroxetine(Paxil)  sertraline (Zoloft) | Increase cholinergic transmission and may lead to urinary UI |
| sodium-glucose cotransporter 2 (SGLT2)  inhibitor | empagloflozin (Jardiance)  canagliflozin (Invokana) | Glycosuria and polyuria, increased propensity to urinary tract infection |
| Others  Gabapentin Glitazones  Non-steroidal anti-inflammatory agents | Gabapentin (Neurontin)  Glitazones  Pioglitazone (Actos)  Rosiglitazone (Avandia)  NSAIDS  ASA  Ibuprofen (Motrin, Advil)  Naproxen (Aleve)  Diclofenac (Voltaren) (oral not gel) | Can cause edema, which can lead to nocturnal polyuria and cause nocturia and night-time UI |

Adapted from Wagg et al 5th consultation