Potentially Inappropriate Drugs in the Frail Elderly

Drug/Drug Class	Warnings /Recommendations
Alpha blockers	
• e.g. doxazosin, prazoxin, terazosin for hypertension • alfuzosin and tamsulosin for prostatism	High risk of postural drop Review benefits -can cause postural drop
Anticholinergics	
• Bladder stabilisers e.g. oxybutynin, solifenacin	Avoid (especially if catheterised!) unless specialist recommendation
• Sedative antihistamines e.g. chlorphenamine, diphenyydramine e.g. Nytol, hydroxyzine, promethazine	
• Antispasmodics e.g. dicyclomine, hyoscine, propantheline	Avoid unless in palliative care for secretion control
Antibiotics	
• Nitrofurantoin, especially if eGFR <60 as ineffective	toxicity in acute and prophylactic use –pulmonary fibrosis, rash, hepatitis
Antiarrhythmics	
• amiodarone, flecainide, sotalol in AF	Safer to aim for rate control
• digoxin	• Ineffective in pAF • Doses >125mcg may be toxic due to renal failure
Antidepressants; tricyclic	
• Amitriptyline, clomipramine, dosulepin, imipramine, trimipramine, trazodone	Avoid use as night sedation Use of low dose for neuropathic pain still increases fall risk Often cause low sodium
Antidepressants; SSRI/SNRI/other	
• Fluoxetine	Avoid as very long acting
• Citalopram, Sertraline, mirtazipine	Caution Start low dose and check sodium at 7-10 days
Antiemetics	
• Metoclopramide and prochlorperazine	Long term use increases risk of parkinsonism
Antihypertensives	
Review antihypertensives in • Patients admitted with or at high risk of falls • Patients with a postural BP drop of **≥20mm,** especially if symptomatic and resting BP also low • Patients with a **Systolic BP below 135mm** or **diastolic BP below 70mm** *and no history of heart failure or liver failure*	

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Antipsychotics in dementia	
e.g. risperidone, olanzapine, quetiapine	Avoid –can worsen symptoms
Antipsychotics in delerium	
• Low dose haloperidol (0.5 to 1mg) for 2-4 weeks is drug of choice if treatment is essential	Ensure treatment is regularly reviewed; stop at discharge whenever possible Ensure instruct GP to review use if essential to continue in community
Benzodiazepines and hypnotics	
• Clonazepam, chlordiazepoxide, diazepam, lorazepam, temazepam • Zopiclone, zolpidem	Avoid except fits, alcohol detox and palliative care Consider withdrawal regime for long term drugs If temporary use for inpatients, stop at discharge
Diabetes Treatments	
Review/reduce in all patients with Type 2 diabetes with HbA1c below 60	
• Sulphonylureas e.g. gliclazide, glimepiride	Caution in in eGFR below 30
• Metformin	Stop if eGFR below 30, review when below 50
• Others	See BNF
Diuretics	
• Thiazides e.g. bendroflumethiazide, indapamide	Caution –drop sodium and potassium
• Spironolactone	• Not if baseline K already over 4.7 or GFR <30 • Combination with ACEI or ARB increases risk of hyperkalaemia
• Furosemide 20mg	• Stop if for ankle swelling only • Review dose if history of CCF
NSAIDs and Cox 2 Inhibitors	
• ibuprofen, diclofenac, ketorolac, naproxen, meloxicam	• Avoid if at all possible otherwise use minimum dose for shortest time • Co-prescribe PPI for GI protection • Monitor renal function
Proton Pump Inhibitors	
• Omeprazole, lansoprazole, pantoprazole, rabeprazole	• Review regularly and do not initiate without clear indication • Usage linked to *C difficile* infection, pneumonias, osteoporosis,
• **Statins:** Review risks (e.g. muscle pain/weakness) and benefits, avoid high doses	
Use recommended in coronary, cerebrovascular, or peripheral vascular disease if they can do normal activities of daily life and life expectancy is > 5 years	

Anticholinergic Burden Scale (ACB)

A score of 3 or more is considered to be clinically relevant in terms of potential for anticholinergic side-effects such as dry mouth, blurred vision, constipation, urinary retention, sedation and consequent increased falls risk. The table below gives most commonly used but is not exclusive.

Score 3	Score 2	Score 1
Chlorpromazine	**Amantadine**	**Atenolol, metoprolol**
Chlorphenamine and other sedative antihistamines	**Carbamazepine**	**Benzodiazepines**
Clozapine, Olanzapine and most atypical antipsychotics	**Levomepromazine**	Cimetidine and **Ranitidine**
Hyoscine, Atropine	**Loperamide**	**Furosemide**
Oxybutynin and most incontinence drugs		**Digoxin**
Paroxetine		**Haloperidol**
Parkinsons treatments –benztropine, orphenadrine, trihexphenydyl		**Nitrates**
Tricyclics; Amitriptyline, clomipramine, dosulepin, imipramine, nortriptyline, trimipramine, trazodone		**Opiates**
		Trazodone

Further Advice is available via your Ward Pharmacist or Medicines Information or GOAM

References:

Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. The American Geriatrics Society Beers Criteria Update Expert Panel. 2012

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