

Health Alliance Medicare Quality Initiative - High Risk Medications in the Elderly

Drug Class	Anticholinergics - 1st Generation Antihistamines	Anti-infective	Cardiovascular	Tricyclic Antidepressants	Nonbenzodiazepine Hypnotics	Estrogen	Sulfonylureas, long-duration	Non-COX-selective NSAIDS	Skeletal Muscle Relaxants
High-Risk Medications to Avoid	hydroxyzine promethazine	nitrofurantoin	digoxin >0.125mg/day	amitriptyline clomipramine doxepin imipramine trimipramine	LUNESTA zaleplon zolpidem	estrogen	glyburide	indomethacin ketorolac	carisoprodol chlorzoxazone cyclobenzaprine metaxalone methocarbamol orphenadrine
Possible Alternative Agents	<u>nausea:</u> ondansetron prochlorperazine <u>miscellaneous:</u> OTC non-sedating antihistamines; desloratidine	cephalexin ciprofloxacin trimethoprim-sulfamethoxazole	lower dose of digoxin and monitor level	<u>depression:</u> nortriptyline venlafaxine <u>neuropathic pain:</u> gabapentin	melatonin ROZEREM	calcium vitamin D alendronate	glimepiride glipizide	ibuprofen meloxicam naproxen	baclofen tizanidine tabs

RATIONALE

Anticholinergics - 1st Generation Antihistamines: Anticholinergic side effects: worsened cognition & behavioral problems; urinary retention OR incontinence; confusion; enhanced sedation, blurred vision, constipation

Anti-infective: Potential for pulmonary toxicity, lack of efficacy if CrCl <60ml/min.

Cardiovascular: Digoxin dosages >0.125 mg/day have been associated with no additional benefit and may have increased toxic effects.

Tricyclic Antidepressants: Highly anticholinergic (dry mouth, blurred vision, constipation), sedating, and causes orthostatic hypotension.

Nonbenzodiazepine Hypnotics: Adverse events similar to those of benzodiazepines in older adults (e.g., delirium, falls, fractures); minimal improvement in sleep latency and duration.

Estrogen: increased risk of breast and/or endometrial cancer; NOT cardioprotective or cognitive protective in older women.

Sulfonylureas, long-duration: Prolonged hypoglycemia; risk of SIADH.

Non-COX-selective NSAIDS: Increases risk of GI bleeding/peptic ulcer disease in high-risk groups. Of all the NSAIDs, indomethacin has most adverse effects.

Skeletal Muscle Relaxants: Most muscle relaxants poorly tolerated by older adults because of anticholinergic adverse effects, sedation, increased risk of fractures; effectiveness at dosages tolerated by older adults is questionable.

The Centers for Medicare and Medicaid Services (CMS) has developed a list of high-risk medications (HRMs) that should be avoided in the elderly population. These HRMs are considered by medical experts to have a high risk of side effects when used in the elderly and can increase morbidity and mortality, decrease quality of life and increase healthcare costs. HRM use is a CMS patient safety measure that contributes to the Health Alliance Medicare Part D Star Rating. The list provided above is not all inclusive. For a complete list, log in to YourHealthAlliance.org and click on Forms and Resources in the top right corner; then click on High-Risk Medications under Prescription Drug Lists.

For more information regarding HRMs please visit www.cms.gov.