



Medication Alternatives for the Elderly

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The following table details the drugs to avoid and the recommended agents to be considered as alternatives.*

| Drug Class | Drugs to Avoid | Concerns | Formulary Alternatives |
|--|--|--|---|
| Antianxiety | meprobamate | Highly addictive and sedating anxiolytic | Buspirone |
| Antiemetic | trimethobenzamide | Can cause extrapyramidal adverse effects. Low effectiveness as an antiemetic | dolasetron (Anzemet [®]), ondansetron, metoclopramide† |
| Antidepressant | amitriptyline | Due to strong anticholinergic and sedative properties, amitriptyline and doxepin are rarely the antidepressant of choice in the elderly | Depending on condition treated alternatives include: citalopram, escitalopram (Lexapro [®]), paroxetine, sertraline, lidocaine, mirtazapine, trazodone |
| | chlorthalidone-amitriptyline | | |
| | perphenazine-amitriptyline | | |
| | doxepin | | |
| Analgesic/Non-narcotic/NSAIDs | indomethacin | Long-term use of full dose has the potential of producing GI bleeding, renal failure, high blood pressure, and heart failure | Short acting NSAIDs, COX-II for short-term use |
| | ketorolac | | |
| | naproxen | | |
| Antihistamines | chlorpheniramine | Potent anticholinergic properties can cause sedation, weakness, blood pressure changes, dry mouth, and urinary retention | fexofenadine, azelastine (Astelin [®]) |
| | cyproheptadine | | |
| | dexchlorpheniramine | | |
| | diphenhydramine | | |
| | hydroxyzine | | |
| | promethazine | | |
| Antipsychotics, typical | mesoridazine (Serentil [®]) | Greater potential for CNS and extrapyramidal adverse effects | olanzapine (Zyprexa [®]), quetiapine (Seroquel [®]), risperidone (Risperdal [®]), pimozide (Orap [®]), trifluoperazine |
| | thioridazine | | |
| Amphetamines | amphetamine mixtures | Potential for dependence, angina, hypertension, and myocardial infarction | No preferred agents exist within the drug class. Perform risk-benefit determination prior to use. |
| | dextroamphetamine | | |
| | dexmethylphenidate | | |
| | methamphetamine | | |
| Long-acting benzodiazepines | chlorthalidone | Long half-life in elderly patients, producing prolonged sedation and increasing the risk of falls and fractures | Benzodiazepines are typically excluded from Medicare Part D benefits. Short- and intermediate-acting are preferred if a benzodiazepine is required. |
| | chlorthalidone/amitriptyline | | |
| | diazepam | | |
| | flurazepam | | |
| Calcium channel blockers | Nifedipine – short-acting only | Potential for hypotension. Adverse effect avoided by use of long-acting | Nifedipine- long-acting (Adalat CC [®] Afeditab [®] CR, Procardia XL [®]) |
| Gastrointestinal antispasmodics | belladonna alkaloids | GI antispasmodic drugs are highly anticholinergic and have uncertain effectiveness | No preferred agents exist within the drug class. Perform risk-benefit determination prior to use. Lower doses should be used and patients should be monitored due to the increased potential for adverse effects. |
| | clidinium-chlorthalidone | | |
| | dicyclomine | | |
| | hyoscyamine | | |
| | propantheline | | |
| H2 antagonist | cimetidine | CNS adverse effects including confusion | famotidine, nizatidine, ranitidine |
| Skeletal muscle relaxants | carisoprodol | Most muscle relaxants are poorly tolerated by elderly patients by causing anticholinergic adverse effects, sedation, and weakness | baclofen, tizanidine |
| | chlorzoxazone | | |
| | cyclobenzaprine | | |
| | metaxalone (Skelaxin [®]) | | |
| | methocarbamol | | |
| | orphenadrine | | |
| Oral Estrogen | Oral estrogen (Premarin, Ogen, Menest) | No cardioprotective effect. Significant risk of carcinogenic effects (breast and endometrial cancer) | No preferred agents exist within the drug class. Perform risk-benefit determination prior to use. |
| Oral hypoglycemics | chlorpropamide | Has a prolonged half-life in elderly patients and could cause prolonged hypoglycemia. It is the only oral hypoglycemic that can cause syndrome of inappropriate antidiuretic hormone secretion | glipizide |
| Narcotics | pentazocine | More CNS adverse events than other narcotic analgesics including hallucinations and confusion. | hydrocodone, morphine, oxycodone, fentanyl transdermal patch |
| | propoxyphene and combination products | Offers few analgesic advantages over acetaminophen, while adverse effects are similar to other narcotic drugs. | |

| Drug Class | Drugs to Avoid | Concerns | Formulary Alternatives |
|------------------------------|--|--|---|
| Vasodilators | dipyridamole | May cause orthostatic hypotension | hydralazine, minoxidil |
| Other | nitrofurantoin (Macrochantin) | May cause renal impairment | Methenamine mandelate, trimethoprim |
| | methyltestosterone (Android, Virilon, Testred) | Potential for prostatic hypertrophy and cardiac problems | Danazol |
| Disease or Condition | Drugs to Avoid | Concerns | Formulary Alternatives |
| Falls | Sedative hypnotics, tricyclic antidepressants, and antipsychotics | Adverse events such as cognitive impairment sedation and confusion, increases risk of falls. | Reassess need for medication and eliminate or reduce dose. Mirtazapine or trazodone for insomnia, or selective serotonin reuptake inhibitors for depression. |
| Cognitive Impairment | Tricyclic antidepressants and sedating antihistamines, antispasmodics, antivertigo/antiemetic, skeletal muscle relaxants, and antiparkinson (benztropine, trihexyphenidyl) | Anticholinergic medications are strongly associated with causing drug-induced delirium. The elderly adults with dementia are more likely to develop drug-induced cognitive impairment than healthy adults. | Depending on condition treated alternatives include: non-sedating antihistamines (fexofenadine, azelastine), selective serotonin reuptake inhibitors, dopamine agonists, mirtazapine, or trazodone. |
| Chronic Renal Failure | NSAIDs and COX-II inhibitors | The inhibition of renal prostaglandin production could lead to acute and chronic nephrotoxic effects. | Acetaminophen, salsalate, lidocaine, low dose corticosteroids (inflammatory conditions) hydrocodone, morphine, oxycodone, fentanyl/transdermal. |

*The Guide is being provided to you by Highmark Inc. as a courtesy and is based on information from the following sources:

1. Beers MH. Explicit criteria for determining potentially inappropriate medication use by the elderly: an update. Arch Intern Med. 1997; 157: 1531-6
2. HEDIS® 2007

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