

Potentially Inappropriate Medications Used in Older Adults

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Drug Class	Generic (Brand) Name	Concern	Recommendation
Tricyclic Antidepressants	Amitriptyline (Elavil®) Doxepin (Sinequan®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • Changes in arrhythmic properties • ↑ Risk of falls • CAUTION WITH: Chronic Constipation and Dementia 	<ol style="list-style-type: none"> 1. Minimize doses whenever possible. 2. Consider SSRIs for depression; monitor bone density. 3. Do not use in combination with other anticholinergics. 4. For insomnia, encourage sleep hygiene. Consider lowest dose of non-barbiturate hypnotics. Use as directed, immediately prior to bedtime.
Antihistamines: 1st Generation	Diphenhydramine (Benadryl®) Clemastine (Tavist®) Chlorpheniramine (Chlor-Trimeton®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia 	<ol style="list-style-type: none"> 1. Use 2nd generation (Claritin® or Allegra®). 2. Minimize duration of therapy. 3. Do not use with other anticholinergic medications.
Antispasmodics	Dicyclomine (Bentyl®) Hyoscyamine (Levsin®) Hyoscyamine (Donnatal®) Clidinium Compound (Librax®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia 	<ol style="list-style-type: none"> 1. Monitor creatinine clearance. 2. Minimize dosing and duration of use.
Benzodiazepines: Long-acting	Chlordiazepoxide (Librium®) Diazepam (Valium®) Chlorazepate (Tranxene®) Fluazepam (Dalmane®)	<ul style="list-style-type: none"> • Prolonged sedation, ↑ risk of falls due to ↓ metabolism and ↑ sensitivity to benzodiazepines 	<ol style="list-style-type: none"> 1. Use shorter-acting benzodiazepines: Lorazepam® < 3 mg/day Oxazepam® 60 mg/day Temazepam® < 15 mg/day
Antipsychotics: Typical	Thioridazine (Mellaril®) Haloperidol (Haldol®) Chlorpromazine (Thorazine®) Mesoridazine (Serentil®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia, Seizures, Parkinson Disease 	<ol style="list-style-type: none"> 1. Determine rationale for appropriate use. 2. Use atypical anti-psychotics if pharmacotherapy is deemed appropriate.
Pain Medications	Propoxyphene (Darvocet®) Meperidine (Demerol®) Ketorolac (Toradol®) Tramadol (Ultram®)	<ul style="list-style-type: none"> • Lack of efficacy and ↑ confusion, dizziness due to ↓ renal function • ↑ Renal toxicity with long-term use • ↑ GI toxicity potential • CAUTION WITH: Dementia, Seizures 	<ol style="list-style-type: none"> 1. Do not use Toradol®. 2. None should be considered the drug of choice for pain. 3. Consider alternate options for pain with caution based on patient history.
NSAIDs	Indomethacin (Indocin®) Oxaprozin (Daypro®) Etodolac (Lodine®)	<ul style="list-style-type: none"> • ↑ GI toxicity potential • ↑ risk of CHF exacerbation • CAUTION WITH: Clotting disorders, Anticoagulation Therapy, Heart Failure, Gastric/Duodenal Ulcer 	<ol style="list-style-type: none"> 1. Use colchicine with renal dosing for gout. 2. Use in combination with acetaminophen to limit dose and duration of NSAIDs. 3. Use Cox-2 inhibitors or a non-selective NSAID with a PPI.
Cardiac Medications	Digoxin (Lanoxin®)	<ul style="list-style-type: none"> • Toxicity due to ↓ renal function 	<ol style="list-style-type: none"> 1. Monitor creatinine clearance. 2. Minimize dosing and duration of use.
Muscle Relaxants	Cyclobenzaprine (Flexeril®) Carisoprodol (Soma®) Metaxalone (Skelaxin®) Methocarbamol (Robaxin®)	<ul style="list-style-type: none"> • ↑ Dizziness • ↑ Drowsiness 	<ol style="list-style-type: none"> 1. Minimize dosing and duration. 2. Do not use in combination with other anticholinergics. 3. Consider topical analgesics, APAP and physical therapy.

Note: This chart is to be used as a guideline for treating elderly patients in order to prevent falls. It does not contain all medications that may affect fall risk in the elderly. Therefore, providers are cautioned to use their clinical judgment.

Prescribing Medications

Below are some helpful points to assist you in prescribing medications for older adults:

- Initiate therapy with low dosages, increase slowly, but do not avoid using adequate doses to achieve the desired outcome.
- Use an alternate medication when possible. Be especially alert to complications if medications on this list are used.
- Update the patient's medication list frequently, including over-the-counter herbal products. Re-evaluate the need for all medications on a regular basis.
- Be aware of the route of clearance of all medications prescribed. Use medications appropriate for the patient's creatinine clearance and/or hepatic function.
- Monitor blood levels of appropriate medications regularly.
- Consider any change in the status of an older patient to be the result of a newly prescribed medication until proven otherwise.