

Medications with Anticholinergic Side-Effects

Many commonly used medications exhibit anticholinergic side-effects (see reverse side for symptoms). The elderly are more susceptible to anticholinergic adverse effects and severity can be cumulative as the number of medications increase. Below are some commonly used medications that have anticholinergic properties. Do not consider this list to be all-inclusive.

<p>Antidepressants: amitriptyline (Elavil[®]), doxepin (Sinequan[®]), imipramine (Tofranil[®]), nortriptyline (Pamelor[®])</p>	<p>Anti-Nausea & Anti-dizziness: promethazine (Phenergan[®]), prochlorperazine (Compazine[®]), trimethobenzamide (Tigan[®]), meclizine (Antivert[®]), scopolamine (TransDerm Scop[®])</p>	<p>Antihistamines: Most OTC allergy-cold preparations, diphenhydramine (Benadryl[®]), Tylenol PM[®]), chlorpheniramine (Chlor-Trimeton[®]), hydroxyzine (Atarax[®], Vistaril[®]), cyproheptadine (Periactin[®])</p>
<p>Muscle relaxants: metaxalone (Skelaxin[®]), cyclobenzaprine (Flexeril[®]), orphenadrine (Norflex[®]), methocarbamol (Robaxin[®]), carisoprodol (Soma[®])</p>	<p>Urinary Antispasmodics: oxybutynin (Ditropan[®]), flavoxate (Urispas[®]), tolteradine (Detrol[®])</p>	<p>GI Antispasmodics: dicyclomine (Bentyl[®]), hyoscyamine (Levsin[®], Levbid[®], Levsinex[®], Anaspaz[®]), belladonna alkaloids, clindinium (Librax[®]), propantheline</p>
<p>Antiarrhythmics: disopyramide (Norpac[®]), procainamide (Pronestyl[®]), quinidine</p>	<p>Antipsychotics: chlorpromazine (Thorazine[®]), thioridazine (Mellaril[®]), clozapine (Clozaril[®]), thiothixene (Navane[®]), fluphenazine (Stelazine[®])</p>	<p>Antidiarrhea: atropine-diphenoxylate (Lomotil[®]) Anti-Parkinson: benztropine (Cogentin[®])</p>



See reverse side for Anticholinergic Symptoms



Anticholinergic Symptoms

Adverse drug effects are multifaceted. Several studies have implicated medications with anticholinergic side-effects in drug-induced cognitive and functional impairment (references available upon request).

Symptoms of Anticholinergic Effects

- Blurred vision
- Confusion, disorientation, memory impairment
- Dizziness when standing
- Drowsiness or sedation
- Nervousness, agitation or anxiety
- Hallucinations and delirium
- Reddening of the face (flushing)
- Fever
- Dry lips, mouth, and throat, speech difficulties, trouble with dentures, chewing and swallowing
- Nausea
- Constipation
- Rapid heart rate
- Weakness
- Trouble urinating or emptying bladder

Steps to Reducing Anticholinergic Effects in the Elderly:

1. Prescribe safe/effective alternatives when available.
2. When anticholinergic agents are required, select best tolerated agents and use at lowest effective doses for shortest possible duration.
3. Routinely evaluate your patients for anticholinergic toxicity. Remember these effects may come on slowly and can be difficult to distinguish from changes in clinical status.
4. Discontinue drugs if significant adverse effects are seen or if clinical efficacy is suboptimal. Tapering may be required.

Medications with anticholinergic effects may also cause, aggravate or contribute to the following health-related issues:

Delirium	Mood	Falls
Cognitive loss/ Dementia	Behavioral symptoms	Communication difficulties
Poor dental conditions	Urinary incontinence	Visual function



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