ABSOLUTE SCOOP

DID YOU KNOW?

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DEPRESCRIBING ANTICHOLINERGICS

Written by Kate Marcum, Consultant Pharmacist, PharmD, BCGP, BCMTMS

The term "deprescribing" refers to a process of medication withdrawal, supervised by a health care professional, to manage polypharmacy and improve outcomes. Deprescribing medications in the geriatric population should be an ongoing practice to help ensure every patient's medication regimen consists of medications with a purpose towards the patient's current disease state goals while minimizing medication risks. The easiest way to prevent medication adverse events is to limit the number of medications being taken. In the long-term care setting, clinical consultant pharmacists focus on medication management, including reviewing medications for appropriateness and necessity in collaboration with the facility's interdisciplinary team, always keeping the resident's goals of care in mind.

One of the most targeted medication groups for deprescribing in older adults is anticholinergic medications. These medications are also referred to as antimuscarinics, cholinergic blockers, or parasympatholytics. They block the neurotransmitter acetylcholine in both central (brain) and peripheral tissues (GI smooth muscle, bronchioles, sweat glands, salivary glands, bladder, and heart). In some cases, a medication's anticholinergic activity is its intended pharmacologic effect. For example, certain medications used for COPD, Parkinson's Disease, and incontinence. However, more commonly the anticholinergic activity of a medication is not its purpose but causes unwanted adverse effects.

The following mnemonics can be used to help identify adverse effects associated with anticholinergic medications:

"ABCD"
A: Anhidrosis (decreased sweating)
B: Blurred vision (increased fall risk)
C: Constipation, Confusion, Cognitive impairment
D: Dry mouth, Dry eyes, Dizziness (increased fall risk), Delirium

"HUT"
H: Hallucinations (visual/auditory)
U: Urinary retention
T: Tachycardia

Although even younger patients can have trouble tolerating these medications, they are particularly dangerous for use in the elderly who are already at risk for falls, declining functional status, and cognitive decline. Despite being recognized as a class to avoid in older adults by the AGS Beers® Criteria and the Screening Tool of Older Persons' Prescriptions (STOPP) Criteria, anticholinergic medications are still commonly prescribed to our older population and even in our most vulnerable older adults in long-term care.

Previous studies have shown that over 50% of nursing home residents receive at least one medication with anticholinergic properties every day. Risks associated with the use of anticholinergic medications are cumulative. The cumulative effect of using multiple medications with anticholinergic properties determines one's "anticholinergic burden." The goal is to decrease this burden by decreasing the number of medications taken with anticholinergic properties or by changing highly anticholinergic medications to safer alternatives. There are several tools to assist clinicians in determining a patient's anticholinergic burden.

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One of the most common tools is the ACB Calculator (www.acbcalc.com) which combines scores of 2 scales: the Anticholinergic Cognitive Burden Scale (ACB) and the German Anticholinergic Burden Scale (GABS). A score of 3+ is associated with increased cognitive impairment and mortality.

To lessen a patient's anticholinergic burden, clinicians should:

1. Identify anticholinergic medications and adverse effects their patients are experiencing.
2. Reduce or discontinue any unnecessary anticholinergic medications.
3. When treatment is necessary (benefits outweigh risks), switch patients to non-pharmacologic interventions and/or alternative safer medications.

The following table lists commonly prescribed anticholinergics and possible alternatives:

Medication Class	Common Examples	Potential Alternatives
TCA Antidepressants	amitriptyline imipramine nortriptyline	*For pain:* topical capsaicin or lidocaine, acetaminophen, low dose gabapentin *For depression:* sertraline, citalopram *For depression + pain:* duloxetine *For sleep:* sleep hygiene education, assess for pain, melatonin, low dose trazodone
SSRI Antidepressants	paroxetine	sertraline, citalopram
Antipsychotics	quetiapine clozapine	aripiprazole
Antihistamines (1st generation)	hydroxyzine	*For itching:* loratadine *For anxiety:* buspirone
	diphenhydramine	*For allergies:* loratadine, intranasal fluticasone
Urinary Antispasmodic	oxybutynin tolterodine trospium	nonpharmacologic interventions (scheduled toileting, pelvic exercises), Myrbetriq, Gemtesa
GI Antispasmodic	dicyclomine	Use the lowest dose for the shortest duration, increase dietary fiber *For constipation:* psyllium, polyethylene glycol, linaclotide, lubiprostone *For diarrhea:* loperamide, rifaximin *For pain:* low-dose SSRI (off-label)
Muscle Relaxant	cyclobenzaprine	physical therapy, tizanidine (monitor for hypotension)

Decreasing an individual's anticholinergic burden continues to be one of the most impactful changes that can be made to a patient's medication regimen. Working together as an interdisciplinary team is key to identifying unwanted adverse effects of medications and ensuring a patient's medication regimen is both well tolerated and in line with their individual disease state goals.

About the Author

Outside of work, Kate is a wife, and a mom to two very busy boys. She loves running in the Cleveland Metroparks, attending spin class, and volunteering at her boys' schools.

Kate joined Absolute in 2023 and quickly added expertise and depth to Absolute's consulting team! She has over 15 years of experience as a consultant pharmacist and discovered her passion for geriatric pharmacy during her clinical year in pharmacy school. Her dedication to serving the older population and their caregivers is truly inspiring. As an outstanding clinical consultant, Kate consistently receives glowing feedback from customers for her exceptional clinical skills. She makes a significant impact, and we are incredibly fortunate to have her on our team!

Why do bananas wear sunscreen?

Because they peel.

Where do sharks go on vacation?

Finland.