

BRINGING CLINICIANS TOGETHER TO DISCUSS CURRENT DRUG THERAPY

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ANTICHOLINERGICS

Seniors will ask you whether anticholinergic medications increase the risk of dementia...due to recent media headlines.

For years, anticholinergics have been on the Beers Criteria of potentially inappropriate meds in the elderly...partly because these meds can cause short-term confusion and memory loss.

Now there's mounting evidence of a link between anticholinergics and increased dementia risk in seniors. And the risk seems to go up the longer the meds are used.

Put this into perspective...and calm patient fears.

There's still no proof that anticholinergic meds CAUSE dementia. Plus the link seems very weak with low-dose or intermittent use.

But think of this as more support for limiting anticholinergic meds in seniors...and deprescribing when possible.

Continue to watch for common Rx culprits, such as overactive bladder meds...tricyclic antidepressants...GI antispasmodics...and muscle relaxants. And steer patients away from anticholinergic OTCs.

See our chart, *Drugs With Anticholinergic Activity*, for more meds to keep in mind...ways to measure anticholinergic "burden"...and alternatives with less anticholinergic activity.

When an anticholinergic med is needed, recommend using the lowest dose possible...and regularly reassessing for benefit.

Clear up confusion. For example, patients may misinterpret headlines and think all antidepressants are anticholinergic. And explain supplements (*Prevagen*, etc) don't have evidence of reducing dementia risk.

Promote other behaviors, such as physical activity and a healthy, balanced diet. Educate that social interaction or "brain games," such as *Lumosity*, can't hurt...but there's little evidence they help.

(For more on this topic, see Clinical Resource #350908 at PharmacistsLetter.com.)

Primary Reference –Coupland CAC, Hill T, Denning T, et al. Anticholinergic drug exposure and the risk of dementia: a nested case-control study. *JAMA Intern Med* 2019 Jun 24. doi: [10.1001/jamainternmed.2019.0677](https://doi.org/10.1001/jamainternmed.2019.0677). [Epub ahead of print].

See LEADER NOTES for answers to discussion questions.

DISCUSSION QUESTIONS

OVERVIEW OF CURRENT THERAPY

1. What is known about anticholinergic medications and the risk of dementia?
2. What type of study was this? How were the patients identified and data obtained?
3. How were the case and control patients identified?
4. What were the case-control analysis methods?
5. What were the study results?

See LEADER NOTES for answers to discussion questions.

6. What were the strengths and weaknesses of this study?

7. Were the results expressed in terms we care about and can use?

HOW SHOULD THE NEW GUIDELINES CHANGE CURRENT THERAPY?

8. Do the results change your practice? How?

APPLY THE NEW FINDINGS TO THE FOLLOWING CASE

EW is a 75-year-old female with a past medical history of depression, seasonal allergic rhinitis, insomnia and urinary incontinence that you are seeing for the first time. EW is accompanied by her daughter, who is concerned that her mother may be experiencing signs of dementia. Over the past 6 months, EW seems to be more forgetful, at times seems confused, and has fallen on 2 separate occasions.

As part of your work up, you notice that EW is on multiple medications with anticholinergic effects, which are linked to cognitive decline. Her medications include paroxetine for depression, amitriptyline for insomnia, and oxybutynin for urinary incontinence. She also reports taking a few OTCs and supplements, but is unable to recall specifics at this time. EW's daughter mentions the patient has been doing well on these medications for years.

See [LEADER NOTES](#) for answers to discussion questions.

9. What can you recommend to address EW's chronic conditions while also limiting anticholinergic medications?

You discuss several medication alternatives with less anticholinergic activity, as well as nonpharmacologic methods to address EW's insomnia and urinary incontinence. EW and her daughter agree that they want to make these changes to see if this helps EW's memory and confusion.

EW and her daughter return in 6 weeks for follow-up and report that EW's confusion seems to be somewhat improved. They also bring a bag full of EW's medications as you requested. On review, you find EW is also taking numerous medications as-needed: cetirizine and diphenhydramine for allergies, promethazine for nausea, senna for constipation, and loperamide for diarrhea.

10. What should you discuss to help EW and her daughter understand the risks of taking multiple medications?

EW and her daughter appreciate knowing these risks and agree that many of these medications are unnecessary. In addition to avoiding unnecessary anticholinergic medications, they ask what else EW can do to lower her risk of cognitive decline?

11. What lifestyle interventions can you advise for EW?

See [LEADER NOTES](#) for answers to discussion questions.

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Coupland CAC, Hill T, Denning T, et al. Anticholinergic drug exposure and the risk of dementia: a nested case-control study. *JAMA Intern Med* 2019 Jun 24. doi: 10.001/jamainternmed.2019.0677. [Epub ahead of print]

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Lancot KL, O'Regan J, Schwartz Y, et al. Assessing cognitive effects of anticholinergic medications in patients with coronary artery disease. *Psychosomatics* 2014;55:61-8.

Richardson K, Fox C, Maidment I, et al. Anticholinergic drugs and risk of dementia: case-control study. *BMJ* 2018;361:k1315.

Risk reduction of cognitive decline and dementia: WHO guidelines. World Health Organization 2019. Available: <https://apps.who.int/iris/bitstream/handle/10665/312180/9789241550543-eng.pdf?ua=1> Accessed August 13, 2019.

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Additional Pharmacist's Letter Resources available at PharmacistsLetter.com

Chart, Drugs with Anticholinergic Activity. *Pharmacist's Letter/Prescriber's Letter*. September 2019.

Chart, Drugs for Parkinson's Disease. *Pharmacist's Letter/Prescriber's Letter*. May 2019.

Chart, Potentially Harmful Drugs in the Elderly: Beers List. *Pharmacist's Letter/Prescriber's Letter*. March 2019.

Chart, Muscle Relaxants. *Pharmacist's Letter/Prescriber's Letter*. March 2019.

Chart, Comparison of Atypical Antipsychotics. *Pharmacist's Letter/Prescriber's Letter*. October 2018.

Toolbox, Chronic Meds in the Elderly: Taking a "Less is More" Approach. *Pharmacist's Letter/Prescriber's Letter*. May 2018.

Chart, Medications and Impaired Driving FAQs. *Pharmacist's Letter/Prescriber's Letter*. January 2018.

Chart, Pharmacotherapy of Dementia Behaviors. *Pharmacist's Letter/Prescriber's Letter*. May 2017.

Chart, Medications for Overactive Bladder. *Pharmacist's Letter/Prescriber's Letter*. April 2017.

Chart, Fall Prevention in the Elderly. *Pharmacist's Letter/Prescriber's Letter*. April 2017.

Patient Education, Strategies for a Good Night's Sleep. *Pharmacist's Letter/Prescriber's Letter*. March 2017.

Chart, Parkinson's Dementia and Dementia With Lewy Bodies. *Pharmacist's Letter/Prescriber's Letter*. July 2016.

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