

Is anticholinergic burden a prognostic factor for future cognitive decline in older adults?

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| Clinical Question | Does the amount of anticholinergic burden predict future cognitive decline or dementia in cognitively unimpaired older adults? |
| Bottom Line | <p>The authors of this Cochrane review advise caution should be taken when prescribing anticholinergic drugs in older adults as anticholinergic drug use was shown to be consistently associated with future cognitive decline or dementia.</p> <p>Results suggest that cognitively unimpaired older adults who use drugs defined as 'definitely' anticholinergic by the ACB scale may have more than two-times greater odds of developing future cognitive decline or dementia than non-users, independent of age, sex, and comorbidities. Moreover, a relationship between severity of anticholinergic burden and future dementia appears to be apparent: odds of developing future cognitive decline or dementia may rise as extent of anticholinergic burden increases. People with a severe anticholinergic burden might see their odds of cognitive decline or dementia increase by as much as 227%.</p> <p>If the observed link demonstrated in this review proves to be causal, these exposure rates imply anticholinergics meaningfully contribute to the global dementia burden.</p> |
| Caveat | The results of this review are tempered by lack of control for reverse causation, imprecision in reported effect size, risk of publication bias, and the general risk of bias observed throughout included studies. Consequently, overall confidence in the evidence for the primary pooled analysis was low. |
| Context | Medications with anticholinergic properties are commonly prescribed to older adults. The cumulative anticholinergic effect of all the medications a person takes is referred to as the 'anticholinergic burden' because of its potential to cause adverse effects. It is possible that high anticholinergic burden may be a risk factor for development of cognitive decline or dementia. There are various scales available to measure anticholinergic burden but agreement between them is often poor. |
| Cochrane Systematic Review | Taylor-Rowan M, Edwards S, Noel-Storr AH, McCleery J, Myint PK, Soiza R, Stewart C, Loke YK, Quinn TJ. Anticholinergic burden (prognostic factor) for prediction of dementia or cognitive decline in older adults with no known cognitive syndrome. Cochrane Database of Systematic Reviews 2021, Issue 4. Art. No.: CD013540. DOI: 10.1002/14651858.CD013540.pub2. This review contains 25 trials with a total of 968,428 participants. |

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Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013540.pub2/full>