

Cholinesterase inhibitors (ChEIs) not associated with an increased risk of upper gastrointestinal (GI) bleeding

Among older patients newly diagnosed with dementia, initiating a cholinesterase inhibitor (donepezil, rivastigmine or galantamine) was not associated with an increased risk of developing upper gastrointestinal bleeding.

What does this mean?

- Previous clinical trials have reported higher rates of GI bleeding in patients receiving donepezil.
- This population-based observational study found no significant association between ChEI use and upper GI bleeding in elderly adults with dementia.

Clinical Implications

- ✓ The effect of ChEIs on upper GI bleeding is likely of little clinical relevance.
- ✓ However, further research is needed to evaluate this association in chronic users of ChEIs and high risk patients

How do we know this?

The ODPRN conducted a population-based retrospective cohort study of patients aged 66 years or older in Ontario, Canada with a diagnosis of dementia who initiated a cholinesterase inhibitor (ChEI) between April 1, 1999 and March 31, 2011. Using propensity score matching, 48,723 new ChEI users were successfully matched to an equal number of unexposed patients with similar baseline characteristics. Overall, 2,104 admissions for upper GI bleeding was observed. Of these events, 785 hospital admissions (10.6 events per 1,000 person-years) occurred among ChEI users and 1,319 admissions (9.6 events per 1,000 person-years) occurred among non-ChEI users. Cox proportional hazards model suggested no association between ChEI use and upper GI bleeding in elderly adults with dementia (hazard ratio = 1.03; 95% confidence interval=0.92, 1.16)

Thavorn K, Camacho X, Juurlink D, Mamdani M. Upper Gastrointestinal Bleeding in Elderly Patients with Dementia Receiving Cholinesterase Inhibitors: A Population-Based Cohort Study. *Journal of the American Geriatrics Society* 2013 (volume/issue TBD)

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