

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Other therapies for prevention/treatment of dementia (part 2)

Following last week's E-bulletin, further potential approaches are explored in this edition:

Ginkgo biloba

A 2007 Cochrane systematic review found inconsistent and unconvincing evidence that ginkgo biloba has predictable and clinically significant benefit on dementia or cognitive function. While one trial in cognitively intact adults suggested ginkgo biloba (taken regularly) may have favourable effects on delaying progression to cognitive impairment, ginkgo was also associated with a significantly greater incidence of strokes and TIAs compared with placebo. A recently published six year randomised controlled trial (RCT), in 3 069 people aged = 75 years with normal cognition or mild cognitive impairment, found no advantage of ginkgo biloba over placebo in reducing the incidence of dementia overall, or Alzheimer's disease specifically. Therefore, ginkgo biloba cannot currently be recommended for the prevention or treatment of dementia.

HMG-CoA reductase inhibitors (statins)

There is currently insufficient evidence to recommend statins for prevention or treatment of dementia (including Alzheimer's disease). A number of early observational studies suggest a link between hypercholesterolaemia and dementia, and that statins may reduce the risk of dementia. However, other observational studies and two large RCTs (with cognition as a tertiary end point) found no benefit in this regard. A number of case reports/case series actually describe cognitive decline in association with statins. Further, well conducted, large trials specifically designed to assess effects of statins on cognition are required - some of this research is currently underway.

Hormone therapy (HT)

Whilst some (but not all) observational studies suggested HT might decrease the risk of Alzheimer's disease, this has not been supported by large randomised trials or systematic reviews. The Women's Health Initiative Memory study found that conjugated equine oestrogen (with or without progestogen) in postmenopausal women aged = 65 years did not improve global cognitive function, or decrease the risk of mild cognitive impairment or dementia, and may actually adversely affect these outcomes. A 2002 Cochrane systematic review concluded that there is no evidence HT maintains or improves cognitive function in women who already have Alzheimer's disease.

NSAIDs

As inflammatory processes have been implicated in the pathogenesis of Alzheimer's disease, it has been hypothesised that NSAIDs may be useful for the prevention and treatment of Alzheimer's disease. However, observational & epidemiological studies & meta-analyses have reported variable results. One meta-analysis concluded that the reported beneficial effects of NSAIDs in observational studies is likely to be the result of various forms of bias. A randomised trial found no benefit of celecoxib or naproxen on cognitive function or incidence of Alzheimer's disease, in healthy older patients with a family history of dementia. Several trials have found no benefit on progression of mild-moderate Alzheimer's disease NSAIDs cannot currently be recommended for the prevention/treatment of Alzheimer's disease.

Vitamin E

Vitamin E is not advocated for the prevention or treatment of dementia. Trials have found no advantage of vitamin E (2000 IU/day) over placebo in slowing progression of mild cognitive impairment to Alzheimer's disease, & limited benefits in moderately severe Alzheimer's disease. Safety concerns suggest that vitamin E may be associated with a dose-dependent increase in all-cause mortality, particularly at doses of = 400 IU/day in patients with chronic diseases.

Acknowledgment – This E-Bulletin is based on work by Jody Braddon, Senior Clinical Pharmacist, DATIS, RGH Note: References are available on request.

FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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