

RGH Pharmacy E-Bulletin

Volume 30 (12): July 21, 2008

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.

Editor: Assoc. Prof. Chris Alderman, University of South Australia – Director of Pharmacy, RGH
© Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia 5041

Transdermal rivastigmine

Alzheimer's disease is the most common form of dementia in older people. It is a chronic progressive disorder characterised by deterioration of cognitive and functional ability. Cholinesterase inhibitors are used in an attempt to delay this deterioration, however they do not halt the progression of the disease.

Donepezil, galantamine and rivastigmine are the three cholinesterase inhibitors available in Australia for the treatment of mild-to-moderate Alzheimer's disease. In many cases donepezil is preferred over rivastigmine as it has once daily dosing (versus twice daily) and has a lower incidence of dose-related adverse effects, such as nausea and vomiting.

In March 2008 a transdermal formulation of rivastigmine, marketed under the brand Exelon[®], was approved by the Australian Therapeutic Goods Administration, and was added to the Pharmaceutical Benefits Scheme at the beginning of July 2008. Exelon[®] patches come in two strengths: a Patch 5 (designed to deliver 4.6mg rivastigmine per 24 hours) and a Patch 10 (which delivers 9.5mg rivastigmine per 24 hours). At an equivalent dose, the cost of the patches is essentially the same as that of the capsules. The patches should be applied once daily to clean, dry, hairless skin on the upper or lower back, upper arm or chest.

The IDEAL trial (Investigation of transDermal Exelon[®] in Alzheimer's disease) assessed the efficacy and safety of rivastigmine transdermal patches in 1195 patients with moderate Alzheimer's disease. This 24 week randomised, double-blind, controlled study, sponsored by Novartis, compared placebo, rivastigmine capsules and rivastigmine patches. Both rivastigmine capsules and patches were superior to placebo in 3 domain-specific assessment tools, and demonstrated clinically significant improvement. The incidence of adverse effects was lower in the rivastigmine patch group than in the rivastigmine capsule group, with only the capsule group having a significantly higher incidence of adverse effects compared to placebo. The most common adverse effects were nausea (placebo 5% vs patch 7% vs capsule 23%) and vomiting (3% vs 6% vs 17%). The patch group also reported varying degrees of erythema and pruritis at the application site, which resulted in discontinuation in 2.4% of patients in the patch group.

Exelon[®] patches provide an alternative to existing oral preparations of cholinesterase inhibitors, especially in patients who cannot tolerate the oral preparations or those with swallowing difficulties. In addition, caregivers may prefer the patches over oral therapy; however this may not necessarily improve compliance. Prescribers should keep in mind that evidence for the efficacy and long term safety of rivastigmine patches is limited. As with any of the cholinesterase inhibitors, diagnosis of Alzheimer's disease should be made or confirmed by a specialist and treatment should be reviewed after six months.

Acknowledgment – This E-Bulletin is based on work by Ameeta Chhanabhai, APAC Pharmacist, RGH

FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
Information in this E-Bulletin is derived from critical analysis of available evidence – individual clinical circumstances should be considered when making treatment decisions. You are welcome to forward this E-bulletin by email to others you might feel would be interested, or to print the E-Bulletin for wider distribution. Reproduction of this material is permissible for purposes of individual study or research.