

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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Transdermal rotigotine

Rotigotine is a non-ergot dopamine agonist indicated for the management of Parkinson's Disease. It acts at dopamine D₁, D₂ and D₃ receptors, with greatest affinity for the D₃ receptor. Rotigotine is indicated for use as monotherapy or in combination with existing levodopa therapy in patients with early to advanced disease.

Rotigotine is administered daily via a transdermal patch available in 2 mg, 4 mg, 6 mg and 8 mg/24 hour strengths. The site of application should be rotated from upper arm to trunk. Approximately 45% of the rotigotine contained in a patch is released within 24 hours of application and steady state is reached after one to two days. Rotigotine undergoes extensive hepatic metabolism, with the metabolites mainly excreted in the urine. A dose reduction should be considered in patients with severe hepatic impairment. After patch removal, plasma concentrations of rotigotine decline by 50% within 5-7 hours.

When used as monotherapy in early Parkinson's Disease, the recommended starting dose of rotigotine is 2 mg/24 hours, with the dose increased weekly according to clinical response and tolerability. In patients with advanced Parkinson's Disease on levodopa therapy, the recommended starting dose is 4 mg/24 hours. In a comparative trial in patients with advanced Parkinson's Disease, rotigotine (up to 16 mg/24 hours) was as effective as oral pramipexole (up to 4.5 mg/day).

Treatment with rotigotine should be withdrawn gradually to reduce the risk of rebound worsening of Parkinson's Disease symptoms and precipitation of neuroleptic malignant syndrome. The daily dose should be reduced by 2 mg every second day until complete withdrawal is achieved.

The adverse profile of rotigotine is similar to that of oral dopamine agonists. As monotherapy in patients with early Parkinson's Disease, the most commonly reported adverse effects are nausea, application-site reactions, dizziness, somnolence, insomnia, headache, vomiting and fatigue. Of these, nausea, application-site reactions, somnolence and insomnia appear to be dose-related.

Patients should be warned of the potential sedating effects of rotigotine; there have been reports of sudden sleep and loss of consciousness while driving. In studies where the drug was used as adjunctive therapy with levodopa, an increase in hallucinations and dyskinesia was associated with rotigotine compared to placebo.

Other adverse effects include elevated blood pressure, increased heart rate, orthostatic hypotension and peripheral oedema. Monitoring of blood pressure is recommended.

Rotigotine offers another choice in the management of patients with Parkinson's Disease, and in particular may be advantageous for patients with swallowing difficulties. Rotigotine is not currently subsidised for supply under the auspices of the Australian Pharmaceutical Benefits Scheme

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