Rotigotine

Traffic light classification- Amber 2
Information sheet for Primary Care Prescribers

CLINICAL INFORMATION

Key points/interactions

- Nausea is a common early side effect but usually responds to domperidone (20mg tds or lowest effective dose – see MHRA advice)
- Rotigotine patches should be applied to a different site every day for 14 days.
- Dopamine agonists may cause compulsive/addictive behaviours such as gambling, compulsive shopping and hypersexuality. Patients rarely recognise such changes as side effects and rarely report them unless specifically asked.

Licensed Indications
Treatment of the signs and symptoms of early-stage idiopathic Parkinson's disease as monotherapy (i.e. without levodopa) or in combination with levodopa, i.e. over the course of the disease, through to late stages when the effect of levodopa wears off or becomes inconsistent and fluctuations of the therapeutic effect occur (end of dose or ‘on-off’ fluctuations).

Therapeutic Summary
As per the licensed indication.

NICE recommendations for the use of Rotigotine in Parkinson's disease (PD) conclude that:

- Dopamine agonists may be used as a symptomatic treatment for people with early PD. (Evidence level A)
- A dopamine agonist should be titrated to a clinically efficacious dose. If side effects prevent this, another agonist or a drug from another class should be used in its place. (Evidence level D)
- In view of the monitoring required with ergot-derived dopamine agonists, a non-ergot derived agonist should be preferred in most cases. (Evidence level D)

Medicines Initiation
Consultant neurologist / specialist experienced in the management of PD.

Dose Regimen
In early stage Parkinson’s disease:

- 2 mg/24 h for 2 weeks
- Increased in weekly increments of 2 mg/24 h if necessary up to a maximal dose of 8 mg/24 h
- 6-8 mg/24 h is usually a therapeutic dose.
In advanced stage Parkinson's disease:

- 4 mg/24 h for 2 weeks
- Increased in weekly increments of 2 mg/24 h if necessary up to a maximal dose of 16 mg/24 h.
- Beyond doses of 8 mg, two patches must be applied each day [and each left on for 24 hours].

Patches should be applied to clean, dry, intact healthy skin. Patches must be applied to a different site each day. Reapplication to the same site within 14 days should be avoided.

**Duration of treatment**
Rotigotine is a treatment for a chronic disease and therefore course length can be many years.

**Contraindications**
- Hypersensitivity to rotigotine or to any of the excipients
- Remove patch before MRI / cardioversion
- Pregnancy & breast feeding

**Precautions**
- Severe hepatic impairment
- Ophthalmological testing recommended (risk of visual disorders) - see monitoring requirements
- Avoid exposure of patch to heat
- History of dementia, confusion or hallucinations – increased risk of neuropsychiatric side effects.
- If treatment discontinuation is required, this should be done gradually. The daily dose should be reduced in steps of 2 mg/24 h with a dose reduction preferably every other day.

**Monitoring**
- Ask about gambling and other addictive behaviours. Patients may deny such symptoms when first asked about them.
- Ophthalmological testing recommended (risk of visual disorders)
- Blood pressure monitoring recommended, especially at the beginning of treatment.

**Adverse Effects**

<table>
<thead>
<tr>
<th>Side Effects</th>
<th>Action</th>
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<tbody>
<tr>
<td>Abdominal pain, dyspepsia, constipation, dry mouth</td>
<td>Usually transient. If persists discuss with neurologist/PD nurse specialist (PDNS)</td>
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<tr>
<td>Nausea &amp; vomiting</td>
<td>Usually transient but may be quite severe. Unless very minor, prescribe Domperidone 20mg tds (or lowest effective dose- see MHRA) during dose titration; this can usually be stopped within a few weeks.</td>
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<tr>
<td>Sedation</td>
<td>Usually transient. Advise patients not to</td>
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<tr>
<td>Condition</td>
<td>Management</td>
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<tr>
<td>Orthostatic hypotension</td>
<td>Usually transient. If persists discuss with neurologist/PDNS.</td>
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<tr>
<td>Light-headedness, dizziness, headache</td>
<td>Usually transient. If persists discuss with neurologist/PDNS.</td>
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<tr>
<td>Palpitations, AF, SVT</td>
<td>Discuss with neurologist/PDNS.</td>
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<tr>
<td>Leg oedema</td>
<td>Rarely a major problem. Discuss with neurologist if no other explanation identified.</td>
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<tr>
<td>Hallucinations, confusion</td>
<td>Discuss with neurologist/PDNS.</td>
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<tr>
<td>Psychotic reactions (other than hallucinations), including delusion, paranoia, delirium.</td>
<td>Discuss with neurologist/PDNS.</td>
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<tr>
<td>'Dopamine dysregulation syndrome’ - manifests as a change in behaviour, typically with an obsessional, risk-taking, sexual or financial axis.</td>
<td>Discuss with neurologist/PDNS.</td>
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<tr>
<td>Hypersensitivity reactions including urticaria, rash, angioedema.</td>
<td>Discontinue and discuss with neurologist/PDNS.</td>
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<tr>
<td>Visual disorders</td>
<td>Ophthalmological testing. Discuss with neurologist/PDNS.</td>
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<td>Raised hepatic enzymes</td>
<td>Discuss with neurologist/PDNS.</td>
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<tr>
<td>Skin reactions</td>
<td>Ensure rotating application site. If troublesome may need to change to alternative agonist. Discuss with neurologist/PDNS.</td>
</tr>
<tr>
<td>Erectile Dysfunction</td>
<td>Rarely a problem. Discuss with neurologist/PDNS.</td>
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</table>

**Clinically relevant medicine interactions and their management**

Patients selected for treatment with Rotigotine are almost certain to be taking concomitant medications for their Parkinson's disease. In the initial stages of Rotigotine therapy the patient should be monitored for unusual side-effects or signs of potentiation of effect.

- **Neuroleptic medicinal products and other centrally acting dopamine antagonists**
e.g. sulpiride, metoclopramide - may have an antagonistic effect if used with rotigotine. Avoid concomitant use.
- **Methyldopa** - antagonistic effect on dopaminergics
- **Memantine** - enhanced effect on dopaminergics.

*For further information on contraindications, precautions, adverse effects and interactions refer to the BNF or Summary of Product Characteristics.*

**Information given to patient**

Patients should be warned of the risk of excessive daytime sleepiness and sudden onset of sleep and the need to exercise caution when driving or operating machinery. If affected patients should refrain from driving or operating machinery until these effects have stopped occurring.

**Products available**

Neupro® ▼ 1mg, 2mg, 3mg, 4mg, 6mg, 8mg patches

**An estimate of the number of patients affected**
10-20 per year

**An estimate of the potential medicine costs (and any additional costs) to primary care**

Neupro 8mg patch £150 (28 days)

**REFERENCES**

British National Formulary Feb 2015
Summary of Product Characteristics December 2014
NICE CG35 Parkinson’s Disease June 2006
MHRA Drug Safety Update: Domperidone: risks of cardiac side effects, **May 2014**

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