1 rotigotine transdermal system (ro-ti-go-tine)  

Suggested use: 

Therapeutic: antiparkinson agent  
Pharmacologic: dopamine agonists  

Pregnancy Category C  

Indications  
Symptomatic management of idiopathic Parkinson’s disease. Moderate-to-severe primary restless leg syndrome.  

Action  
Acts as an agonist of dopamine in the CNS, primarily at D2 receptor sites.  

Pharmacokinetics  
Absorption: 46% absorbed from patch over 24 hr.  
Distribution: Unknown.  
Protein Binding: 90%.  
Metabolism and Excretion: Mostly metabolized and excreted in urine as metabolites (71%); 23% excreted in feces.  
Half-life: Biphasic: initial half-life 3 hr; terminal half-life 5–7 hr.  

TIME/ACTION PROFILE (plasma concentrations)  
ROUTE ONSET PEAK DURATION  
Transdermal 1–3 hr 15–18 hr (range 4–27 hr)  
24 hr  

Contraindications/Precautions  
Contraindicated in: Hypersensitivity to rotigotine or sulfites.  

Use Cautiously in: Severe cardiovascular disease (may q risk of postural hypotension or syncope); Severe hepatic impairment; Major psychotic disorder; OB: May be excreted in breast milk and pose a risk of adverse effects in the infant; use only if maternal benefits outweigh risk to fetus; Pedi: Safety not established.  

Adverse Reactions/Side Effects  
CNS: DROWSINESS, insomnia, aggression, agitation, confusion, delirium, dizziness, extrapyramidal reactions, hallucinations, headache, paraesthesia, paresthesia, sleep attacks, seizures (gastrointestinal, sexual). CV: Hypertension, peripheral oedema, postural hypotension, syncopal, tachycardia, MI, nausea, vomiting, anorexia, dry mouth, dyspnea, SIADH, cardiomegaly, arrhythmia, tachycardia, MI, tachycardia, MI. Neuro: decreased alertness, excitement, anxiety, restlessness, tremor, vertigo, nystagmus, slurred speech, ataxia, dizziness, hypotension, confusion, somnolence, paranoid delusions, neuritis, paresthesia, Minus fever.  

Clinical Dose-Related Reactions  
(1 mg/24 hr)  
CNS: Drowsiness, hallucinations, insomnia, agitation, confusion, delirium, dementia, dementia, extrapyramidal reactions, hallucinations, headache, paraesthesia, paresthesia, sleep attacks, seizures (gastrointestinal, sexual). CV: hypertension, peripheral oedema, postural hypotension, syncopal, tachycardia, MI, nausea, vomiting, anorexia, dry mouth, dyspnea, SIADH, cardiomegaly, arrhythmia, tachycardia, MI, tachycardia, MI. Neuro: decreased alertness, excitement, anxiety, restlessness, tremor, vertigo, nystagmus, slurred speech, ataxia, dizziness, hypotension, confusion, somnolence, paranoid delusions, neuritis, paresthesia, Minus fever.  

Drug Interactions  
Concurrent use of dopamine agonists including some antipsychotics or metoclopramide may reduce effectiveness.  

Route/Dosage  
Parkinson’s Disease  
Transdermal (Adults): Early-stage—2 mg/24 hr initially, may ↑ by 2 mg/24 hr weekly, up to 6 mg/24 hr; Advanced-stage—4 mg/24 hr initially, may ↑ by 2 mg/24 hr weekly, up to 8 mg/24 hr.  

Restless Legs Syndrome  
Transdermal (Adults): 1 mg/24 hr initially, may ↑ by 1 mg/24 hr weekly, up to 3 mg/24 hr.  

NURSING IMPLICATIONS  

Assessment  
• Assess for allergy to sulfite, may be more common in asthmatics.  
• Assess frequently for drowsiness, a common side effect of rotigotine.  
• Assess for application site reactions (erythema, edema, pruritus). If persistent, increasing in severity, or spreading outside application site, discontinue therapy.  

Interventions  
• Monitor BP, sitting and standing, periodically during therapy, especially during dose escalation.  

Teaching Points  
• Use cautiously in patients with a history of cardiovascular disease.  
• Do not exceed dose above recommended dose.  
• Do not exceed maximum daily dose.  
• Avoid strenuous activities with head down, such as skiing, swimming, during sleep.  
• May cause drowsiness. Do not drive or perform activities requiring mental alertness until response to therapy is known.  
• Avoid concurrent use of metoclopramide or antipsychotics with rotigotine.  
• May cause or exacerbate psychosis.  
• Advise patient to increase dose by 2 mg/24 hr weekly until patient experiences benefit from treatment.  
• Advise adult patients to avoid exposure to strong sunlight.  
• Advise patients to keep patient information card at all times.  
• Advise patient to store at room temperature.  
• Advise patient to report any adverse reactions to health care provider.
site, determine risk/benefit ratio. If generalized skin reaction (allergic maculopapular rash) occurs, discontinue rotigotine.

- Monitor for weight gain; usually associated with peripheral edema.
- Assess for development of new or increased gambling urges, sexual urges, or other urges during therapy.
- Parkinson's Disease: Assess patient for signs and symptoms of Parkinson's disease (tremor, muscle weakness and rigidity, stoop) before and throughout therapy.
- Restless Leg Syndrome: Assess sleep patterns and frequency of restless leg disturbances.
- Lab Test Considerations: May cause anemia and serum albumin and glucose levels.
- May cause BUN and GGT levels.

Potential Nursing Diagnoses

- Impaired physical mobility (Indications)
- Risk for injury (Adverse Reactions)

Implementation

- Transdermal: Apply once daily to clean, dry, intact skin on abdomen, thigh, hip, flank, shoulder, or upper arm. Hold in place for 20–30 seconds to make sure of good contact, especially around edges. If applied to hairy area, shave area at least 3 days prior to application. Do not apply to areas that could be rubbed by tight clothing, are under a waistband, or to skin folds. Do not apply to skin that is red, irritated, or impaired. Do not apply cream, lotions, ointments, oils, or powders to skin areas where patch will be placed. Wash hands following application to remove any drug and do not touch eyes. Rotate patch site daily; do not use same application site more than once every 14 days. Do not remove patch. Remove patch slowly and carefully to avoid irritation. Fold over to stick to itself and discard. Wash application site with soap and water to remove drug and adhesive. May use baby or mineral oil to remove excess residue. Avoid using alcohol or other solvents, may cause skin irritation. If therapy is discontinued, decrease gradually by 2 mg/24 hrs every other day until complete withdrawal.

Patient/Family Teaching

- Instruct patient on proper method of patch application. Advise patient to wear patch continuously for 24 hrs and to apply system at the same time each day; if patch change is missed, apply as soon as possible and replace at usual time the following day. Patients may bathe, shower or swim with patch on. If patch falls off, apply a new one immediately to a different site and change according to regular schedule. Do not stop therapy without consulting health care professional. Withdraw.

- May cause drowsiness and unexpected episodes of falling asleep. Caution patient to avoid driving and other activities requiring alertness until response to medication is known. Advise patient to notify health care professional if episodes of falling asleep occur.

- Advise patient to notify health care professional if application site reaction occurs.

- Advise patient to remove rotigotine patch prior to magnetic resonance imaging or cardioversion.

- Caution patient to avoid exposing patch to external heat (heating pad, electric blanket, hot tub, sauna, heated water bed, prophygrometer, etc.).

- Inform patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and consult health care professional before taking any new medications or alcohol.

- Advise patient to notify health care professional if they experience new or increased gambling, sexual or other intense urges during therapy. May require discontinuation.

- Advise patient to have health care professional check their skin for skin cancer regularly due to increase risk of melanoma.

- Advise female patients to notify health care professional of pregnancy if planned or suspected or breast feeding.

Evaluation/Desired Outcomes

- Improvement in signs and symptoms of early-stage Parkinson's disease.
- Decrease in restless legs and improved sleep.

Why was this drug prescribed for your patient?