orphenadrine (or-fen-a-dre-en)

- Generic Name: Orphenadrine

**Classification**
- Therapeutic: Skeletal muscle relaxant (centrally acting)
- Pharmacologic: Diphenhydramine analogues

**Pregnancy Category C**

**Indications**
- Adjunct to rest and physical therapy in the treatment of muscle spasm associated with acute painful musculoskeletal conditions. Adjunct therapy of Parkinson’s disease (Canadian labeling only).

**Action**
- Skeletal muscle relaxation, probably due to CNS depression. 

**Pharmacokinetics**
- Absorption: Readily absorbed after oral and IM administration; IV administration results in complete bioavailability.
- Distribution: Unknown.
- Metabolism and Excretion: Mostly metabolized by the liver.
- Half-life: 14 hr.

**TIME/ACTION PROFILE (skeletal muscle effects)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>within 1 hr</td>
<td>6–8 hr</td>
<td>12 hr</td>
</tr>
<tr>
<td>IM</td>
<td>5 min</td>
<td>30 min</td>
<td>12 hr</td>
</tr>
<tr>
<td>IV</td>
<td>immediate</td>
<td>unknown</td>
<td>12 hr</td>
</tr>
</tbody>
</table>

**Contraindications/Precautions**
- Contraindicated in: Hypersensitivity, Bladder neck obstruction, prostate hypertrophy, glaucoma, myasthenia gravis, peptic ulcer disease, GI obstruction.
- Use Cautiously in: Underlying cardiovascular disease, Impaired renal function, Old Age.

**Adverse Reactions/Side Effects**
- **Interactions**
  - Drug-Drug: Concurrent use of other anticholinergics ↑ risk of anticholinergic side effects, ↑ risk of CNS depression with other CNS depressants including alcohol, antihistamines, antidepressants, sedative/hypnotics, or opioid analgesics.
  - Drug-Natural Products: Kava-kava, valerian, chamomile, or hops can ↑ CNS depression.

**Route/Dosage**

**Skeletal muscle relaxation**
- **PO (Adults):** 100 mg twice daily.
- **IV, IM (Adults):** 60 mg q 12 hr.

**Adjunctive therapy of Parkinson’s disease**
- **PO (Adults):** 50 mg 3 times daily (lower doses if used with other agents).

**NURSING IMPLICATIONS**

**Assessment**
- Geriatric: Assess geriatric patients for anticholinergic adverse effects (dilution, acute confusion, dizziness, dry mouth, blurred vision, urinary retention, constipation, tachycardia) and sedation.
- Skeletal Muscle Relaxant: Assess patient for pain, muscle stiffness, and range of motion before and periodically throughout therapy.
- Parkinson’s Disease: Assess parkinsonian and extrapyramidal symptoms (restlessness or desire to keep moving, rigidity, tremors, pill rolling, mask-like face, shuffling gait, muscle spasm, resting movements, difficulty speaking or swallowing, loss of balance control, ptosis) is ascended is improved or progresses, or if there is an apparent unmasking of another disease process, periodic changes in therapy.
- **Lab Test Considerations:** Monitor CBC and renal and hepatic function tests periodically during prolonged therapy.

**Nursing Considerations**

- **Overdose:** Indications indicate most frequent.
- **Discontinued:** Discontinued.
Potential Nursing Diagnoses

Acute pain (Indications)
Impaired physical mobility (Indications)
Risk for injury (Side Effects)

Implementation

- Provide safety measures as indicated. Supervise ambulation and transfer of pa-
tients.
- PO: Do not break, crush or chew extended-release tablets.

IV Administration

- Direct IV: May be administered undiluted. Concentration: 30 mg/mL.

Patient/Family Teaching

- Advise patient to take medications as directed. Take missed doses within 1 hr; if
  not, return to regular dosing schedule. Do not double doses.
- Encourage patient to comply with additional therapies prescribed for muscle
  spasm (rest, physical therapy, heat).
- Medications may cause dizziness, drowsiness, and blurred vision. Advise patient to
  avoid driving and other activities requiring alertness until response to drug is
  known.
- Instruct patient to make position changes slowly to minimize orthostatic hypoten-
sion.
- Advise patient to avoid concurrent use of alcohol and other CNS depressants while
  taking this medication.
- Emphasize the importance of routine follow-up exams to monitor progress.

Evaluation/Desired Outcomes

- Decreased musculoskeletal pain and muscle spasticity.
- Increased range of motion.
- Decrease in tremors and rigidity and an improvement in gait and balance.

Why was this drug prescribed for your patient?