Ergotamine (er-got-a-meen)

**Ergomar**

**Classification**
- **Therapeutic:** Vascular headache suppressants
- **Pharmacologic:** Ergot alkaloids

**Pregnancy Category:** X

### Indications
Treatment of vascular headaches including: Migraine with or without aura, Cluster headaches.

### Action
Vasoconstriction of dilated blood vessels by stimulating alpha-adrenergic and serotonin (5-HT) receptors. Larger doses may produce alpha-adrenergic blockade and vasodilation.

### Therapeutic Effects:
Constriction of dilated carotid artery bed with resolution of vascular headache.

### Pharmacokinetics
- **Absorption:** Unpredictably absorbed (60%) from the GI tract. Sublingual absorption is very poor.
- **Distribution:** Crosses the blood-brain barrier and enters breast milk.
- **Protein Binding:** 93–98%.
- **Metabolism and Excretion:** Highly metabolized (90%) by the liver. Some metabolites are active.
- **Half-life:** 1.5–2.5 hours.

### Time/Action Profile (relief of headache)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>SL</td>
<td>unknown</td>
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### Contraindications/Precautions

**Contraindicated in:**
- Peripheral vascular disease
- Ischemic heart disease
- Uncontrolled hypertension
- Severe renal or liver disease
- Malnutrition

**Use Cautiously in:**
- Diseases associated with peripheral vascular pathology such as diabetes mellitus
- Concurrent administration of other vasoconstricting agents

### Adverse Reactions/Side Effects

- **CNS:** Dizziness
- **CV:** Myocardial infarction, hypertension, angina pectoris, arterial spasm, intermittent claudication
- **GI:** Abdominal pain, nausea, vomiting, diarrhea, polydipsia
- **Neuro:** Leg weakness, numbness or tingling in fingers or toes
- **Misc:** Fatigue

### Interactions

**Drug-Drug:**
- Concurrent use with beta blockers, oral contraceptives, macrolide anti-infectives (erythromycin, troleandomycin), cocaine (heavy smoking) may block peripheral vasoconstriction. Diuresis and antihypertensives may antagonize the antihypertensive effects of ergotamine. Concurrent use with vasoconstrictors may have additive effects (avoid concurrent use). Concurrent use with almotriptan, naratriptan, rizatriptan, sumatriptan, or zolmitriptan may result in prolonged vasoconstriction (allow 24 hr between use).

### Route/Dosage

**SL (Adults):**
- 1–2 mg initially, then 1–2 mg q 30 min until attack subsides or a total of 6 mg has been given. Should not be used more than twice weekly, with at least 5 days between courses.
- 1–2 mg PO at bedtime daily for 10–14 days have been used to terminate series of cluster headaches.

### Nursing Implications

**Assessment**
- Assess frequency, location, duration, and characteristics (pain, nausea, vomiting, visual disturbances) of chronic headaches. During acute attack, assess type, location, and intensity of pain before and 60 min after administration.
- Monitor BP and peripheral pulses periodically during therapy. Report any increase in BP.
- Assess for signs of ergotism (cold, numb fingers and toes; nausea; vomiting; headache; muscle pain; weakness).
- Assess for nausea and vomiting. Ergotamine stimulates the chemoreceptor trigger zone.

**Rash and Overdose:**
- Rash is manifested by severe ergotism (cold feet, abdominal pain, periorbital edema, the extremities) and gangrene. Vasodilators, desmopressin, or heparin may be ordered to improve circulation.

**Use Caution in:**
- Illnesses associated with peripheral vascular pathology such as diabetes mellitus
- Concurrent administration of other vasoconstricting agents

**Pediatric:** Children ≤6 yr (safety not established)
Potential Nursing Diagnoses

Acute pain (Indications)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation

- Administer as soon as patient reports prodromal symptoms or headache.
- SL: Allow tablet to dissolve under tongue. Do not allow patient to eat, drink, or smoke while tablet is dissolving.

Patient/Family Teaching

- Instruct patient to take ergotamine at the first sign of an impending headache and not to exceed the maximum dose prescribed.
- Encourage patient to rest in a quiet, dark room after taking ergotamine.
- Review symptoms of toxicity. Instruct patient to report these promptly.
- Caution patient to smoke and avoid exposure to cold, these vasoconstrictors may further impair peripheral circulation.
- May cause dizziness. Caution patient to avoid driving and other activities requiring alertness until response to the drug is known.
- Advise patient to avoid alcohol, which may precipitate vascular headaches.
- Instruct female patients to inform health care professional if they plan or suspect pregnancy. Ergotamine should not be taken during pregnancy.

Evaluation/Desired Outcomes

- Relief of pain from vascular headaches.

Why was this drug prescribed for your patient?