ergonovine (er-goe-noe-ven)
classified as Ergotrate

**Indications**
Prevention and treatment of postpartum or postabortion hemorrhage caused by uterine atony or involution.

**Action**

**Pharmacokinetics**
Absorption: Well absorbed after oral administration.
Distribution: Unknown.
Metabolism and Excretion: Unknown. Probably metabolized by the liver.
Half-life: Unknown.

**TIME/ACTION PROFILE**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>5–15 min</td>
<td>unknown</td>
<td>3 h r</td>
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</tbody>
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**Contraindications/Precautions**
Contraindicated in: Hypersensitivity; Avoid chronic use; Should not be used to induce labor.

Use Cautiously in: Hypertensive or eclamptic patients (increased susceptibility to hypertensive and arrhythmogenic side effects); Severe hepatic or renal disease; Septic; Third stage of labor.

**Adverse Reactions/Side Effects**

**Interactions**
Drug-Drug: Excessive vasoconstriction may result when used with other vasoconstrictors, such as dopamine or mepivacaine. May ↑ the risk of adverse reactions with bromocriptine.

**Route/Dosage**

<table>
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<tr>
<th>INDICATION</th>
<th>ROUTE</th>
<th>DOSE</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td>Oxytocic</td>
<td>PO, SL (Adults)</td>
<td>0.2–0.4 mg q6–12 hr (usual course is 48 hr)</td>
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<td>IM, IV (Adults)</td>
<td>200 mcg (0.2 mg) q2–4 hr for up to 5 doses</td>
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**NURSING IMPLICATIONS**
Assessment:
- Monitor BP, pulse, and respirations every 15–30 min until transfer to the postpartum unit, then every 1–2 hr. Report hypotension, chest pain, arrhythmias, head or change in neurological status.
- Monitor amount and type of vaginal discharge. Report symptoms of hemorrhage (increased bleeding, hypotension, pallor, tachycardia) immediately.
- Palpate uterine fundus; note position and consistency. Notify health care professional if fundus fails to contract in response to ergonovine. Assess patient for cramping, nausea, or vomiting.
- Assess for signs of ergotism (cold, numb fingers and toes, nausea, vomiting, diarrhea, headache, muscle pain, weakness).
- If patient fails to respond to ergonovine, check serum calcium level. Correction of hypocalcemia may restore responsiveness.

**Lab Test Considerations:** May cause ↓ serum prolactin level, which inhibits synthesis of breast milk.

**Toxicity and Overdose:** Toxicity, initially manifested as ergotism, may cause seizures and gangrene. Seizures are treated with anticonvulsants. Vasodilators and heparin may be ordered to improve circulation to extremities.

**Potential Nursing Diagnoses**
- Ineffective tissue perfusion (Indications)
- Risk for injury (Side Effects)
- Implementation:
- Do not administer solution that is discolored or contains a precipitate.
- PO: Administration is usually limited to 48 hr postpartum, by which time the danger of hemorrhage from uterine atony has passed.
Tablets may be administered SL.

IM: The preferred route is IM. Firm uterine contractions are produced within a few minutes. Dose may need to be repeated every 2–4 hr for full therapeutic effect.

IV Administration

- pH: 2.7–3.5.

- Direct IV: The IV route is reserved for severe uterine bleeding. Dilute: Dilute with 5 mL of 0.9% NaCl. Administer slow IV push over at least 1 min through Y-site injection of an IV of D5W or 0.9% NaCl.

Patient/Family Teaching

- Review symptoms of toxicity with patient. Instruct the patient to report occurrence of these immediately.

- Instruct patient that uterine cramping demonstrates effectiveness of therapy.

- Explain need for pad count to determine degree of bleeding. Instruct patient to report immediately an increase in degree of bleeding or passage of clots.

- Instruct patient to report breast-feeding difficulties.

- Caution patient not to smoke while receiving ergonovine; nicotine is also a vasoconstrictor.

Evaluation/Desired Outcomes

- Uterine contraction and cramping in the prevention or cessation of uterine hemorrhage after delivery or abortion.

Why was this drug prescribed for your patient?