cabergoline (ka-ber-goe-leen)

**Indications**
Treatment of hyperprolactinemia (idiopathic or pituitary in origin).

**Action**
Inhibits secretion of prolactin by acting as a dopamine agonist.

**Therapeutic Effects:**
Decreased secretion of prolactin in hyperprolactinemia.

**Pharmacokinetics**

- **Absorption:** Well absorbed but undergoes extensive first-pass hepatic metabolism.
- **Distribution:** Widely distributed, concentrates in pituitary.
- **Metabolism and Excretion:** Extensively metabolized by the liver; 4% excreted unchanged in urine.
- **Protein Binding:** 40–42%.
- **Half-life:** 63–69 hr.

**TIME/ACTION PROFILE (effect on serum prolactin levels)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>2–3 hr</td>
<td>unknown</td>
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**Contraindications/Precautions**

- Hypersensitivity to cabergoline or ergot alkaloids.
- Uncontrolled hypertension.
- History of pulmonary, pericardial, or retroperitoneal fibrotic disorders.
- History of cardiac valvular disease.
- Lactation: Has been associated with hypertension, stroke, and seizures. Not to be used for suppression of physiological lactation.

**Use Cautiously in:**
- Hepatic impairment.
- Patients who have received medications associated with valvular disorders.
- OB: Use only if clearly needed.
- Pedi: Safety not established.

**Adverse Reactions/Side Effects**

- **CNS:** Dizziness, headache, depression, drowsiness, fatigue, nervousness, vertigo.
- **Resp:** Pulmonary fibrosis, pleural effusion.
- **CV:** Pericardial fibrosis, vasculitis, myocarditis, postural hypotension, hot flashes.
- **GI:** Hepatotoxicity, nausea, vomiting, abdominal pain, dyspepsia, diarrhea.
- **GU:** Dysmenorrhea.

**Interactions**

- Drug-Drug: May increase the effects of SSRIIs and other selective serotonin agonists (induces serotonin syndrome).
- Use caution when administering concurrent with other medications that lower BP.

**Route/Dosage**

- **PO (Adults):**
  - 0.25 mg twice weekly; may be increased at 4-wk intervals up to 1 mg twice weekly.

**NURSING IMPLICATIONS**

- **Assessment:**
  - Monitor BP before and frequently during initial therapy. Initial doses <2 mg may cause orthostatic hypotension. Use with caution when administering concurrently with other medications that lower BP. Supervise ambulation and transfer during initial dosing to prevent injury from hypotension.
  - Evaluate the cardiac status and monitor echocardiography at baseline and every 6–12 mo after initiation of therapy or as indicated clinically by signs and symptoms of valvular disease (dyspnea, edema, HF, new cardiac murmur). Use lowest dose and reassess need for therapy periodically.
  - Monitor for signs and symptoms of pulmonary fibrosis (dyspnea, persistent coughing, difficulty with breathing while lying down, peripheral edema) periodically during therapy. Obtain chest x-ray prior to therapy and chest x-ray and CT scan periodically during therapy to assess for pulmonary fibrosis.
  - **Lab Test Considerations:** Monitor serum prolactin concentration monthly until normalized (<20 mcg/L in women and <15 mcg/L in men).
- Monitor erythrocyte sedimentation rate (ESR) and creatinine at baseline and as needed during therapy.
Potential Nursing Diagnoses
Risk for injury (Side Effects)
Impaired physical mobility (Indications)

Implementation
● PO: May be taken without regard to food.

Patient/Family Teaching
● Instruct patients to take medication as directed. Take missed doses as soon as possible within 1 or 2 days. If not remembered until time of next dose, double dose. If nausea occurs, discuss with health care professional.
● May cause drowsiness and dizziness. Caution patient to avoid driving and other activities requiring alertness and response to medication as known.
● Advise patient to change positions slowly to minimize orthostatic hypotension.
● Caution patient to avoid concurrent use of alcohol during therapy.
● Instruct patients taking cabergoline for pituitary tumors to inform health care professional immediately if signs of tumor enlargement occur (Alerted vision, sudden headaches, severe nausea, and vomiting).
● Advise patient to notify health care professional if signs of cardiac disorders (dizziness, syncope, chest pain, palpitations) occur.
● Advise patient to consult with health care professional regarding a nonhormonal method of birth control. Women should contact health care professional promptly if pregnancy is planned or suspected.

Evaluation/Desired Outcomes
● Decrease in galactorrhea in patients with hyperprolactinemia.
● After a normal serum prolactin level has been maintained for more than 6 mo, cabergoline may be discontinued. Serum prolactin levels should be monitored periodically to determine necessity of continuing cabergoline.

Why was this drug prescribed for your patient?