**Levocetirizine** *(lee-vo-se-tir-iz-teen)*

**Classification**
- Therapeutic: antihistamines
- Pharmacologic: piperazines

**Pregnancy Category B**

**Indications**

**Action**
Antagonizes the effects of histamine at H1 receptor sites; does not bind to or inactivate histamine.

**Therapeutic Effects:**
Decreased symptoms of histamine excess (rhinitis, itching).

**Pharmacokinetics**
- **Absorption:** Well absorbed following oral administration.
- **Distribution:** Unknown.
- **Metabolism and Excretion:** Excreted mostly unchanged by the kidneys (85%).
- **Half-life:** 8 hr.

**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>rapid</td>
<td>0.9 hr</td>
<td>24 hr</td>
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**Contraindications/Precautions**
- **Contraindicated in:** Hypersensitivity to levocetirizine or cetirizine; Severe renal impairment (CCr ≤ 10 mL/min); Pedi: Pediatric patients with impaired renal function; Lactation.
- **Use Cautiously in:** Geri: Consider age-related decreases in renal function and concurrent disease states; OB: Use only if clearly needed; Pedi: Children (safety not established).

**Adverse Reactions/Side Effects**

- **CNS:** Drowsiness, fatigue, weakness.
- **GI:** Dry mouth.
- **GU:** Urinary retention.
- **Other:** Cessation of menstruation, decreased total serum bilirubin and transaminases.

**Drug-Drug:**
- Levels of ritonavir may be increased; CNS depression may occur with alcohol, opioid analgesics, or sedative hypnotics.

**Route/Dosage**
- **PO:** (Adults and Children ≥ 12 yr): 5 mg once daily in the evening; some patients may respond to 2.5 mg once daily.
- **PO:** (Children 6–11 yr): 2.5 mg once daily in the evening.
- **PO:** (Children 6 mo–5 yr): 1.25 mg (oral solution) once daily in the evening.

**RENAL IMPAIRMENT**
- **PO:** (Children 6–11 yr): CCr 50–80 mL/min—2.5 mg once daily; CCr 30–50 mL/min—2.5 mg every other day; CCr 10–30 mL/min—2.5 mg twice weekly (every 3–4 days).

**NURSING IMPLICATIONS**

**Assessment**
- Assess allergy symptoms (rhinitis, conjunctivitis, hives) before and periodically during therapy.
- Assess lung sounds and character of bronchial secretions. Maintain fluid intake of 1500–2000 mL/day to decrease viscosity of secretions.
- **Lab Test Considerations:** May cause false-negative result in allergy skin testing.
- **May cause transient ↑ in serum bilirubin and transaminases.**

**Potential Nursing Diagnoses**
- Ineffective airway clearance (Indications)
- Risk for injury (Adverse Reactions)

**Implementation**
- **PO:** Administer once daily in the evening regardless of food. Solution is clear and colorless; administer undiluted.

**Patient/Family Teaching**
- Instruct patient to take medication as directed. Do not increase dosage, may cause increased drowsiness.
- May cause drowsiness. Caution patient to avoid driving or other activities requiring alertness until response to medication is known. 

**Interactions**
- **Drug-Drug:** ↑ level of ethanol; ↑ OS depression may occur with alcohol, opioid analgesics, or sedative hypnotics.

<table>
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<tr>
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<th>Peak</th>
<th>Duration</th>
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</table>

**Discontinued.**
Advise patient to avoid taking alcohol or other CNS depressants concurrently with this drug.

Advise patient that good oral hygiene, frequent rinsing of mouth with water, and chewing gum or candy may minimize dry mouth. Patient should notify dentist if dry mouth persists >2 wk.

**Evaluation/Desired Outcomes**

- Decrease in allergic symptoms
- Resolution of uncomplicated skin manifestations of chronic idiopathic urticaria.

*Why was this drug prescribed for your patient?*