chlorpheniramine (klor-fen-**ir**-a-meen)

Aller-Chlor, Allergy, Chlo-Amine, Chlorate, Chlor-Trimeton, Chlor-Trimeton Allergy 4 Hour, Chlor-Trimeton Allergy 8 Hour, Chlor-Trimeton Allergy 12 Hour, ✱Chlor-Tripolon, PediaCare Allergy Formula, Phenetron, Telechlor, Teldrin

Classification

Therapeutic: allergy, cold, and cough remedies, antihistamines

Pregnancy Category B

Indications

Relief of allergic symptoms caused by histamine release, including: Nasal allergies, Allergic dermatoses. Management of severe allergic or hypersensitivity reactions, including anaphylaxis and transfusion reactions.

Action

Antagonizes the effects of histamine at H_2-receptor sites; does not bind to or inactivate histamine. **Therapeutic Effects:** Decreased symptoms of histamine excess (sneezing, rhinorrhea, nasal and ocular pruritus, ocular tearing, and redness).

Pharmacokinetics

Absorption: Well absorbed following oral and parenteral administration.

Distribution: Widely distributed. Minimal amounts excreted in breast milk. Crosses the blood-brain barrier.

Metabolism and Excretion: Extensively metabolized by the liver.

Half-life: 12–15 hr.

TIME/ACTION PROFILE (antihistaminic effects)

ROUTE	ONSET	PEAK	DURATION
PO	15–30 min	6 hr	4–12 hr
PO–ER	unknown	unknown	8–24 hr
Subcut	unknown	unknown	4–12 hr
IM	unknown	unknown	4–12 hr
IV	rapid	unknown	4–12 hr

Contraindications/Precautions

Contraindicated in: Hypersensitivity; Acute attacks of asthma; ***Lactation:*** Avoid use or use alternative feeding method; Known alcohol intolerance (some liquid forms); ***Pedi:*** Children <4 yr (OTC cough and cold products containing this medication should be avoided).

Use Cautiously in: Angle-closure glaucoma; Liver disease; ***Geri:*** Appears on Beers list. Geriatric patients are more susceptible to adverse reactions due to anticholinergic effects; ***OB:*** Safety not established.

Adverse Reactions/Side Effects

CNS: drowsiness, dizziness, excitation (in children). **EENT:** blurred vision. **CV:** hypertension, arrhythmias, hypotension, palpitations. **GI:** dry mouth, constipation, obstruction. **GU:** retention, urinary hesitancy.

Interactions

Drug-Drug: ↑ CNS depression with other **CNS depressants**, including **alcohol**, **opioid analgesics**, and **sedative/hypnotics**. **MAO inhibitors** intensify and prolong anticholinergic effects of antihistamines. ↑ anticholinergic effects with other **drugs possessing anticholinergic properties**, including **antidepressants**, **atropine**, **haloperidol**, **phenothiazines**, **quinidine**, and **disopyramide**.

Route/Dosage

PO (Adults): 4 mg q 4–6 hr *or* 8–12 mg of extended-release formulation q 8–12 hr (not to exceed 24 mg/day).

PO (Geriatric Patients): 4 mg twice daily *or* 8 mg of extended-release formulation at bedtime.

PO (Children 6–12 yr): 2 mg 3–4 times daily (not to exceed 12 mg/day).

Injectable formulation is available only in Canada

Subcut, IM, IV (Adults): 5–40-mg single dose (not to exceed 40 mg/day).

Subcut (Children): 87.5 mcg (0.0875 mg)/kg or 2.5 mg/m² q 6 hr as needed.

NURSING IMPLICATIONS

Assessment

- Assess allergy symptoms (rhinitis, conjunctivitis, hives) prior to and periodically during therapy.
- Monitor pulse and BP before initiating and throughout IV therapy.
- ***Geri:*** Assess for adverse anticholinergic effects (delirium, acute confusion, dizziness, dry mouth, blurred vision, urinary retention, constipation, tachycardia).
- 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 reactions on allergy skin tests; discontinue 4 days prior to testing.

Potential Nursing Diagnoses

Ineffective airway clearance (Indications)
Risk for injury (Adverse Reactions)

Implementation

- **PO:** Administer oral doses with food or milk to decrease GI irritation. Extended-release tablets and capsules should be swallowed whole; do not crush, break, or chew. Chewable tablets should not be swallowed whole; chew well before swallowing.
- **Subcut, IM:** The 100-mg/mL solution is recommended for IM or subcut routes only. The 10-mg/mL solution may be used for IM, subcut, or IV.

IV Administration

- **pH:** No Data.
- **Direct IV:** ***Diluent:*** May be given undiluted. Use only the 10 mg/mL strength for IV administration. ***Concentration:*** 10 mg/mL. ***Rate:*** Administer each 10-mg dose over at least 1 min.

Patient/Family Teaching

- Instruct patient to take chlorpheniramine as directed.
- **Caution parents to avoid OTC cough and cold products while breast feeding or to children <4 yrs.**
- ***Geri:*** Teach patient and family about anticholinergic effects and to contact health care professional if effects persist.
- May cause drowsiness. Caution patient to avoid driving or other activities requiring alertness until response to drug is known.
- Caution patient to avoid using alcohol or other CNS depressants concurrently with this drug.
- Advise patient that good oral hygiene, frequent rinsing of mouth with water, and sugarless gum or candy may help relieve dryness of mouth.
- Instruct patient to contact health care professional if symptoms persist.

Evaluation/Desired Outcomes

- Decrease in allergic symptoms.

Why was this drug prescribed for your patient?