carbinoxamine (car-bi nox-a-meen)
Karbinal ER
Classification
Therapeutic: allergy, cold, and cough remedies, none assigned
Pharmacologic: antihistamines
Pregnancy Category C

Indications
Relief of allergic symptoms caused by histamine release including seasonal/perennial allergic rhinitis, vasomotor rhinitis, allergy and angioedema (due to inhalant allergies or foods), mild/uncomplicated allergic skin conditions (urticaria or angioedema), dermatographism, as adjunctive management (with epinephrine and other standard acute treatments) of anaphylaxis, and to decrease severity of allergic reactions to blood/plasma.

Action
Antagonizes the effects of histamine at H1 – receptor sites; does not bind to or inactivate histamine. Significant CNS depressant and anticholinergic properties.

Therapeutic Effects:
Decreased symptoms of histamine excess (sneezing, rhinorrhea, nasal/ocular pruritus, ocular tearing/redness and skin itching/urticaria).

Pharmacokinetics
Absorption: Well absorbed following oral administration.
Distribution: Unk.
Metabolism and Excretion: Extensively metabolized by the liver, inactive metabolites excreted in urine. Negligable renal elimination of unchanged drug.
Half-life: 17 hr.
TIME/ACTION PROFILE (antihistaminic effects)
ROUTE ONSET PEAK DURATION
PO unk 6.7 hr 12 hr

Contraindications/Precautions
Contraindicated in: Hypersensitivity, including sulfite allergy; Lactation: Avoid if breastfeeding (risk of death in infant); Concurrent use of MAOIs; Pedi: Children ≤ 2 yr (deaths have been reported).

Use Cautiously in: Increased intracranial pressure or severe narrow angle glaucoma; Hypothyroidism; Gastrointestinal disease including hyperperistalsis. Stomach/duodenal ulcer or pyloroduodenal obstruction. Geri: Elderly may be more susceptible to adverse reactions; OB: Use in pregnancy only if clearly needed; Ped: Younger children may be more sensitive to sedation or excitation.

Adverse Reactions/Side Effects
CNS: dizziness, drowsiness, sedation.
Resp: thickened bronchial secretions.
GI: epigastric distress.
Neuro: disturbed coordination.

Interactions
Drug-Drug: Concurrent use with MAOIs may anticholinergic effects. Risk of CNS depression with other CNS depressants including alcohol, other antihistamines, opioid analgesics and sedative/hypnotics.

Route/Dosage
Use appropriate measuring device.
PO (Adults and Children ≥ 12 yr): 6–16 mg (7.5–20 mL) every 12 hr.
PO (Children 2–11 yr): 0.2–0.4 mg/kg/day in divided doses every 12 hr; Children 6–11 yr—6–12 mg (7.5–15 mL) every 12 hr; Children 4–5 yr—1–2 mg (3.75–10 mL) every 12 hr; Children 2–3 yr—1–2 mg (2.5–5 mL) every 12 hr.

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 uric acid levels.

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

Implementation
Begin with lowest dose and increase as needed and tolerated. Dose is based on condition severity and patient response.

Gastrointestinal distress (Contraindications)
● PO: Administer twice daily.
● Use a calibrated measuring device for accurate dose; household tablespoon is not accurate and could lead to overdose.

**Patient/Family Teaching**

● Instruct patient to take medication as directed.
● May cause dizziness and drowsiness. Caution patient to avoid driving or other activities requiring alertness until response to medication is known.
● 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 sugarless gum or candy may minimize dry mouth. Patient should notify dentist if dry mouth persists >2 wk.
● Instruct female patients to notify health care professional if pregnancy is planned or suspected and if breast feeding.

**Evaluation/Desired Outcomes**

● Decrease in allergic symptoms.

Why was this drug prescribed for your patient?