pseudoephedrine (soo-doe-e-fed-rin)
Oranyl, Silfedrine Children’s, Sudafed 12 Hour, Sudafed 24 Hour, Sudafed Children’s, Sudafed Maximum Strength Nasal Decongestant, Sud-Tab, Sudocort, Sudocort Children’s

Classification
Therapeutic: allergy, cold, and cough remedies, nasal drying agents/decongestants
Pharmacologic: adrenergics, alpha adrenergic agonists
Pregnancy Category B

Indications
Symptomatic management of nasal congestion associated with acute viral upper respiratory tract infections. Used in combination with antihistamines in the management of allergic conditions. Used to open obstructed eustachian tubes in chronic otic inflammation or infection.

Action
Stimulates alpha- and beta-adrenergic receptors. Produces vasoconstriction in the respiratory tract mucosa (alpha-adrenergic stimulation) and possibly bronchodilation (beta2-adrenergic stimulation).

Therapeutic Effects:
Reduction of nasal congestion, hyperemia, and swelling in nasal passages.

Pharmacokinetics
Absorption: Well absorbed after oral administration.
Distribution: Appears to enter the CSF; probably crosses the placenta and enters breast milk.
Metabolism and Excretion: Partially metabolized by the liver. 55–75% excreted unchanged by the kidneys (depends on urine pH). Half-life: Children: 3.1 hr; Adults: 9–16 hr (depends on urine pH).

TIME/ACTION PROFILE (decongestant effects)
ROUTE ONSET PEAK DURATION
PO 15–30 min unknown 4–6 hr
PO-ER 60 min unknown 12 hr

Contraindications/Precautions
Contraindicated in: Hypersensitivity to sympathomimetic amines; Hypertension, severe coronary artery disease; Concurrent MAO inhibitor therapy; Known alcohol intolerance (some liquid products).
Use Cautiously in: Hyperthyroidism; Diabetes mellitus; Prostatic hyperplasia; Ischemic heart disease; Glaucoma; OB, Lactation: Safety not established.

Adverse Reactions/Side Effects
CNS: SEIZURES, anxiety, nervousness, dizziness, drowsiness, restlessness, weakness.
Resp: respiratory difficulty.
CV: cardiovascular collapse, palpitations, hypertension, tachycardia.
GI: anorexia, dry mouth.
GU: dysuria.
Misc: diaphoresis.

Interactions
Drug-Drug: Concurrent use with MAO inhibitors may cause hypertensive crisis. Additive adrenergic effects with other adrenergics. Concurrent use with beta blockers may result in hypertension or bradycardia. Drugs that acidify the urine may increase effectiveness. Phenothiazines and tricyclic antidepressants potentiate pressor effects. Drugs that alkalinate the urine may decrease effectiveness.
Drug-Food: Foods that acidify the urine may increase effectiveness. Foods that alkalinate the urine may decrease effectiveness.

Route/Dosage
PO (Adults and Children >12 yr): 60 mg q 6 hr as needed (not to exceed 240 mg/day) or 120 mg extended-release preparation q 12 hr or 240 mg extended-release preparation q 24 hr.
PO (Children 6–12 yr): 30 mg q 6 hr as needed (not to exceed 120 mg/day).
PO (Children 4–5 yr): 15 mg q 6 hr (not to exceed 60 mg/day).

NURSING IMPLICATIONS
Assessment
• Assess congestion (nasal, sinus, eustachian tube) before and periodically during therapy.
• Monitor pulse and BP before beginning therapy and periodically during therapy.
• Assess long sounds and character of bronchial secretions. Maintain fluid intake of 1500–2000 mL/day to decrease viscosity of secretions.

NURSING DIAGNOSIS
• Decreased tissue perfusion (bronchopulmonary)

DRUG INTERACTIONS
• Additive adrenergic effects with other adrenergics.

OTHER THERAPIES
• Concurrent use with MAO inhibitors may cause hypertensive crisis.
• Additive adrenergic effects with other adrenergics.
• Concurrent use with beta blockers may result in hypertension or bradycardia.
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Potential Nursing Diagnoses

Ineffective airway clearance (Indications)

Implementation

- Do not confuse Sudafed with sotalol or Sudafed PE.
- Administer pseudoephedrine at least 2 hr before bedtime to minimize insomnia.
- PO: Extended-release tablets and capsules should be swallowed whole, do not crush, break, or chew. Contents of the capsule can be mixed with jam or jelly and swallowed without chewing for patients with difficulty swallowing.

Patient/Family Teaching

- Instruct patient to take medication as directed and not to take more than recommended. Take missed doses within 4 hr, if remembered later, omit. Do not double doses. Cautions parents to avoid OTC cough and cold products while breast feeding or to children ≤4 yr.
- Instruct patient to notify health care professional if nervousness, slow or fast heart rate, breathing difficulties, hallucinations, or seizures occur, because these symptoms may indicate overdose.
- Instruct patient to contact health care professional if symptoms do not improve within 7 days or if fevers present.

Evaluation/Desired Outcomes

- Decreased nasal, sinus, or eustachian tube congestion.

Why was this drug prescribed for your patient?