**Promethazine Hydrochloride Tablets, USP**

**Rx only**

**DESCRIPTION**

Each oral dosage form contains 12.5 mg, 25 mg, or 50 mg promethazine HCl. The inactive ingredients present are colloidal silicon dioxide, disodium EDTA, hypromellose, lactose monohydrate, magnesium stearate, microcrystalline cellulose, saccharin sodium, and sodium starch glycolate; 12.5 mg also contains - FD&C Yellow No. 5. Aluminum Lake and FD&C Yellow No. 6. Aluminum Lake; 50 mg also contains - FD&C Blue No. 2. Aluminum Lake and FD&C Red No. 40. Aluminum Lake.

Promethazine HCl is a racemic compound; the empirical formula is C_{17}H_{21}N_3O.Cl and its molecular weight is 320.88.

Promethazine HCl, a phenothiazine derivative, is designated chemically as 10H-Pentathiazine-10-ethanamine, N,N,N-trimethyl, monohydrochloride, (±)- with the following structural formula:

\[
\text{CH}_2\text{CH}(\text{CH}_3)\text{N}(\text{CH}_3)₂\ + \text{HCl}
\]

Promethazine HCl occurs as a white to faint yellow, practically odorless, crystalline powder which slowly oxidizes and turns blue on prolonged exposure to air. It is freely soluble in alcohol.

**CLINICAL PHARMACOLOGY**

Promethazine is a phenothiazine derivative which differs structurally from the antipsychotic phenothiazines by the presence of a branched side chain and no substituent nitrogens, although at this configuration it has its relative lack of (1/10 of that of chlorpromazine) dopamine antagonist properties. Promethazine is an H1 receptor blocking agent. In addition to its antihistaminic action, it provides clinically useful sedative and antitussive effects.

Promethazine is well absorbed from the gastrointestinal tract. Clinical effects are apparent within 20 minutes after oral administration and generally last four to six hours, although it may persist as long as 12 hours. Promethazine is metabolized by the liver to a variety of compounds; the sulfones of promethazine and N-demethylpromethazine are the predominant metabolites appearing in the urine.

**INDICATIONS AND USES**

Promethazine hydrochloride tablets are useful for:

- Perennial and seasonal allergic rhinitis.
- Vasomotor rhinitis.
- Allergic conjunctivitis due to inhalant allergens and foods.
- Mild, uncomplicated allergic skin manifestations of urticaria and angioedema.
- Amelioration of allergic reactions to blood or plasma.

Anaphylactic reactions, as adjunctive therapy to epinephrine and other standard measures, after the acute manifestations have been controlled.

Preoperative, postoperative, or obstetric sedation.

Prevention and control of nausea and vomiting associated with certain types of anesthetic agents.

Therapy adjunctive to meperidine or other analgesics for control of postoperative pain.

Sedation in both children and adults, as well as relief of apprehension and production of drowsiness from which the patient can be easily aroused. Active and prophylactic treatment of motion sickness.

Antiemetic therapy in postoperative patients.

**CONTRAINDICATIONS**

Promethazine hydrochloride tablets are contraindicated for use in pediatric patients less than 2 years of age.

Promethazine hydrochloride tablets are contraindicated in comatose states, and in individuals known to be hypersensitive or to have had an idiosyncratic reaction to promethazine or other phenothiazines.

Antihistamines are contraindicated for use in the treatment of lower respiratory tract symptoms including asthma.

**WARNINGS**

**Promethazine Hydrochloride Tablets Should Not Be Used in Pediatric Patients Less Than 2 Years of Age Because of the Potential for Fatal Respiratory Depression. Postmarketing Cases of Respiratory Depression, Including Fatalities, Have Been Reported with Use of Promethazine Hydrochloride Tablets in Pediatric Patients Less Than 2 Years of Age. A Wide Range of Promethazine Hydrochloride Dosages in Pediatric Patients Have Resulted in Respiratory Depression in These Patients.**

**CAUTION Should Be Exercised When Administering Promethazine Hydrochloride Tablets to Pediatric Patients 2 Years of Age and Older. It is Recommended That the Lowest Effective Dose of Promethazine Hydrochloride Tablets Be Used in Pediatric Patients 2 Years of Age and Older and Concomitant Administration with Other Drugs with Respiratory Depressant Effects Be Avoided.**

**CNS Depression**

Promethazine hydrochloride tablets may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery. The impairment may be ampliﬁed by concomitant use of other central nervous system depressants such as alcohol, sedatives/hypnotics (including barbiturates), narcotics, narcotic analgesics, general anesthetics, tricyclic antidepressants, and tranquilizers; therefore, such agents should either be eliminated or given in a reduced dosage in the presence of promethazine HCl (see PRECAUTIONS – Information for Patients and Drug Interactions).
dose of narcotics should be reduced by one-quarter to one-half. Dosage must be individualized. Excessive amounts of promethazine HCl relative to a narcotic may lead to restlessness and motor hyperactivity in the patient with pain; these symptoms usually disappear with depression, control of the pain.

Epinephrine – Because the potential for promethazine hydrochloride tablets to reverse epinephrine’s vasopressor effect, epinephrine should NOT be used to treat hypotension associated with promethazine hydrochloride tablets overdose.

Anticholinergics – Concomitant use of other agents with anticholinergic properties should be undertaken with caution.

Moxonidine Oxidase Inhibitors (MAOI) – Drug interactions, including an increased incidence of paradoxical reactions may be evident, especially in children and geriatric patients. Convolusions may rarely occur. A paradoxical-type reaction has been reported in children receiving single doses of 75 mg to 125 mg orally characterized by hyperexcitability and nightmares. Atropine-like signs and symptoms – dry mouth, fixed, dilated pupils, flushing, as well as gastrointestinal symptoms – may occur.

Treatment

Treatment of overdose is essentially symptomatic and supportive. Only in cases of extreme overdose or individual sensitivity do vital signs, including respiration, pulse, blood pressure, temperature, and EKG, need to be monitored. Activated charcoal orally or by gastricavage may be given, or sodium or magnesium sulfate orally as a cathartic. Attention should be given to the re-establishment of adequate respiratory exchange through the use of a patient airway, institution of assisted or controlled ventilation. Diazepam may be used to control convulsions. Acidosis and electrolyte losses should be corrected. Note that any depressant effects of promethazine HCl are not reversed by naloxone. Avoid analgesics which may cause convulsions.

The treatment of choice for resulting hypotension is administration of intravenous fluids, as determined by monitoring if indicated. In the event that vasopressors are considered for the management of severe hypotension which does not respond to intravenous fluids and repositioning, the administration of norepinephrine or phenylephrine should be considered. EPINEPHRINE SHOULD NOT BE USED, since its use in patients with partial adrenergic blockade may further lower the blood pressure. Extrapyramidal reactions may be treated with anticholinergic antiparkinsonian agents, diphenhydramine, or barbiturates. Oxygen may also be administered.

Limited experience with dialysis indicates that it is not helpful.

DOSAGE AND ADMINISTRATION

Promethazine hydrochloride tablets are contraindicated for children under 2 years of age (see WARNINGS – Black Box Warning and Use in Pediatric Patients).

Allergy

The average oral dose is 25 mg taken before retiring; however, 12.5 mg may be taken before breakfast and 6.25 mg before dinner. Single 25-mg doses at bedtime of 6.25 to 12.5 mg taken three times daily will usually suffice. After initiation of treatment in children or adults, dosage should be adjusted to the smallest amount adequate to relieve symptoms. The administration of promethazine HCl in 25-mg doses will control minor transfusion reactions of an allergic nature.

Motion Sickness

The average adult dose is 25 mg taken twice daily. The initial dose should be taken one-half to one hour before anticipated travel and be repeated 8 to 12 hours later, if necessary. On succeeding days of travel, it is recommended that 25 mg be given on arising and again before the evening meal. For children, promethazine hydrochloride tablets, 12.5 to 25 mg, twice daily, may be administered.

Nausea and Vomiting

Antiemetics should not be used in vomiting of unknown etiology in children and adolescents (see WARNINGS – Use in Pediatric Patients).

The average effective dose of promethazine hydrochloride tablets for the active therapy of nausea and vomiting in children or adults is 25 mg. 12.5- to 25-mg doses may be repeated, as necessary, at 4- to 6-hour intervals.

For nausea and vomiting in children, the usual dose is 0.5 mg per pound of body weight, and the dose should be adjusted to the age and weight of the patient and the severity of the condition being treated.

For prophylaxis of nausea and vomiting, as during surgery and the post-operative period, the average dose is 25 mg repeated at 4- to 6-hour intervals, as necessary.

Sedation

This product relieves apprehension and induces a quiet sleep from which the patient can be easily aroused. Administration of 12.5 to 25 mg promethazine hydrochloride tablets by the cool route at bedtime will provide sedation in children. Adults usually require 25 to 50 mg for nighttime, presurgical, or obstetrical sedation.

Pre- and Postoperative Use

Promethazine hydrochloride tablets in 12.5- to 25-mg doses for children and 50-mg tablets for adults the night before surgery relieves apprehension and produces a quiet sleep.

For preoperative medication, children require doses of 0.5 mg per pound of body weight in combination with an appropriately reduced dose of narcotic or barbiturate and the appropriate dose of an atropine-like drug. Usual adult dosage is 50 mg promethazine hydrochloride with an appropriately reduced dose of narcotic or barbiturate and the required amount of a belladonna alkaloid.

Postoperative sedation and adjunctive use with narcotics may be obtained by the administration of 12.5 to 25 mg in children and 25- to 50-mg doses in adults.

Promethazine hydrochloride tablets are contraindicated for children under 2 years of age.

HOW SUPPLIED

Promethazine Hydrochloride Tablets, USP are available as follows:

12.5 mg: orange, round, scored tablet debossed “S138” on one side and debossed “V” on the reverse side.

25 mg: white, round, scored, flat-faced beveled edge tablet debossed “S137” on one side and debossed “V” on the reverse side, in bottles of 10, 100, and 1000.

50 mg: pink, round tablet debossed “S136” on one side and debossed “V” on the reverse side, in bottles of 10, 100, and 1000.

Keep tightly closed. Store at 20°-25°C (68°-77°F) [see USP Controlled Room Temperature].

Protect from light.

Dispense in a tight, light-resistant container as defined in the USP.

Manufactured for:

QUALITEST PHARMACEUTICALS

Huntville, AL 35811

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