

# CIPLACTIN Tablets (Cyproheptadine hydrochloride)

## Composition

### CIPLACTIN Tablets

Each tablet contains:

Cyproheptadine Hydrochloride (anhydrous) IP ... 4 mg

## Dosage Form

Oral Tablet

## Pharmacology

### Pharmacodynamics

Cyproheptadine hydrochloride (HCl) is a serotonin and histamine antagonist with anticholinergic and sedative effects. Anti-serotonin and antihistamine drugs appear to compete with serotonin and histamine, respectively, for receptor sites.

### Pharmacokinetics

After a single 4 mg oral dose of <sup>14</sup>C-labelled Cyproheptadine HCl in normal subjects, given as tablets, 2-20% of the radioactivity was excreted in the stools. Only about 34% of the stool radioactivity was unchanged drug, corresponding to less than 5.7% of the dose. At least 40% of the administered radioactivity was excreted in the urine. No detectable amounts of unchanged drug were present in the urine of patients on continuous 12-20 mg daily doses. The principle metabolite found in human urine has been identified as a quaternary ammonium glucuronide conjugate of cyproheptadine HCl. Elimination is diminished in renal insufficiency.

## Indications

Perennial and seasonal allergic rhinitis

Vasomotor rhinitis

Allergic conjunctivitis due to inhalant allergens and foods

Mild, uncomplicated allergic skin manifestations of urticaria and angio-oedema

Amelioration of allergic reactions to blood or plasma

Cold urticaria

Dermatographism

As therapy for anaphylactic reactions adjunctive to epinephrine and other standard measures after the acute manifestations have been controlled.

## Dosage and Administration

Dosage should be individualized according to the needs and the response of the patient. Each tablet contains 4 mg of cyproheptadine HCl

### Adults

The total daily dose for adults should not exceed 0.5 mg/kg/day. The therapeutic range is 4 to 20 mg a day, with the majority of patients requiring 12 to 16 mg a day. An occasional patient may require as much as 32 mg a day for adequate relief. It is suggested that dosage be initiated with 4 mg (one tablet) three times a day and adjusted according to the size and response of the patient.

### Paediatric Patients

#### Aged 2 to 6 years

The total daily dosage for paediatric patients may be calculated on the basis of body weight or body area using approximately 0.25 mg/kg/day or 8 mg per square meter of body surface (8 mg/m<sup>2</sup>)

The usual dose is 2 mg (half tablet) two or three times a day, adjusted as necessary to the size and response of the patient. The dose is not to exceed 12 mg a day.

#### Aged 7 to 14 years

The usual dose is 4 mg (one tablet) two or three times a day adjusted as necessary to the size and response of the patient. The dose is not to exceed 16 mg a day.

## Contraindications

### Newborn or Premature Infants

This drug should not be used in newborn or premature infants.

### Lactating Mothers

Because of the higher risk of antihistamines for infants generally and for newborns and premature babies in particular, antihistamine therapy is contraindicated in lactating mothers.

### Other Conditions

Hypersensitivity to cyproheptadine HCl and other drugs of similar chemical structure.

Monoamine oxidase (MAO) inhibitor therapy (see **Drug Interactions**)

Angle-closure glaucoma

Stenosing peptic ulcer

Symptomatic prostatic hypertrophy

Bladder neck obstruction

Pyloroduodenal obstruction

Elderly, debilitated patients

# Warnings and Precautions

## General

Cyproheptadine HCl has an atropine-like action and, therefore, should be used with caution in patients with the following:

- History of bronchial asthma
- Increased intraocular pressure
- Hyperthyroidism
- Cardiovascular disease
- Hypertension

## Paediatric Patients

Overdosage of antihistamines, particularly in infants and young children, may produce hallucinations, CNS depression, convulsions, respiratory and cardiac arrest, and death. Antihistamines may diminish mental alertness; conversely, particularly, in the young child, they may occasionally produce excitation.

## CNS Depressants:

Antihistamines may have additive effects with alcohol and other CNS depressants, e.g., hypnotics, sedatives, tranquilizers, antianxiety agents.

## Activities Requiring Mental Alertness:

Patients should be warned about engaging in activities requiring mental alertness and motor coordination, such as driving a car or operating machinery. Antihistamines are more likely to cause dizziness, sedation, and hypotension in elderly patients. (see **Warnings And Precautions, Geriatric Use**).

## Drug Interactions

MAO inhibitors prolong and intensify the anticholinergic effects of antihistamines. Antihistamines may have additive effects with alcohol and other central nervous system (CNS) depressants, e.g., hypnotics, sedatives, tranquilizers, anti-anxiety agents.

## Pregnancy

### Pregnancy Category B

Reproduction studies have been performed in rabbits, mice and rats at oral or subcutaneous doses up to 32 times the maximum recommended human oral dose and have revealed no evidence of impaired fertility or harm to the foetus due to cyproheptadine HCl. Cyproheptadine HCl has been shown to be foetotoxic in rats when given by intraperitoneal injection in doses four times the maximum recommended human oral dose. Two studies in pregnant women, however, have not shown that cyproheptadine HCl increases the risk of abnormalities when administered during the first, second and third trimesters of pregnancy. No teratogenic effects were observed in any of the newborns. Nevertheless, because the studies in humans cannot rule out the possibility of harm, cyproheptadine HCl should be used during pregnancy only if clearly needed.

## **Lactation**

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, and because of the potential for serious adverse reactions in lactating infants from cyproheptadine HCl, a decision should be made whether to discontinue lactation or to discontinue the drug, taking into account the importance of the drug to the mother (see **Contraindications**).

## **Paediatric Use**

Safety and effectiveness in paediatric patients below the age of 2 years have not been established. (see **Contraindications, Newborn or Premature Infants, and Warnings And Precautions, Paediatric Patients**).

## **Geriatric Use**

Clinical studies of Cyproheptadine HCl tablets did not include sufficient numbers of subjects aged 65 years and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between elderly and younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy (see **Warnings And Precautions, Activities Requiring Mental Alertness**).

## **Undesirable Effects**

Adverse reactions that have been reported with the use of antihistamines are as follows:

### **Central Nervous System**

Sedation and sleepiness (often transient), dizziness, disturbed coordination, confusion, restlessness, excitation, nervousness, tremor, irritability, insomnia, paraesthesias, neuritis, convulsions, euphoria, hallucinations, hysteria, faintness.

### **Integumentary**

Allergic manifestation of rash and oedema, excessive perspiration, urticaria, photosensitivity.

### **Special Senses**

Acute labyrinthitis, blurred vision, diplopia, vertigo, tinnitus.

### **Cardiovascular**

Hypotension, palpitation, tachycardia, extrasystoles, anaphylactic shock.

### **Hematologic**

Haemolytic anaemia, leucopenia, agranulocytosis, thrombocytopenia.

### **Digestive System**

Cholestasis, hepatic failure, hepatitis, hepatic function abnormality, dryness of mouth, epigastric

distress, anorexia, nausea, vomiting, diarrhoea, constipation, jaundice.

## **Genitourinary**

Urinary frequency, difficult urination, urinary retention, early menses.

## **Respiratory**

Dryness of nose and throat, thickening of bronchial secretions, tightness of chest and wheezing, nasal stuffiness.

## **Miscellaneous**

Fatigue, chills, headache, increased appetite/weight gain.

## **Overdosage**

Antihistamine overdosage reactions may vary from CNS depression to stimulation especially in pediatric patients. Also, atropine-like signs and symptoms (dry-mouth; fixed, dilated pupils; flushing etc.) as well as gastrointestinal symptoms may occur.

*If vomiting has not occurred spontaneously*, the patient should be induced to vomit with syrup of ipecac.

*If the patient is unable to vomit*, perform gastric lavage followed by activated charcoal. Isotonic or half isotonic saline is the lavage of choice. Precautions against aspiration must be taken especially in infants and children.

When life-threatening CNS signs and symptoms are present, intravenous physostigmine salicylate may be considered. Dosage and frequency of administration are dependent on age, clinical response and recurrence after response.

*Saline cathartics*, as milk of magnesia, draw water into the bowel by osmosis and, therefore, are valuable for their action in rapid dilution of bowel contents.

Stimulants should not be used.

Vasopressors may be used to treat hypotension.

The oral LD<sub>50</sub> of Cyproheptadine HCl is 123 mg/kg, and 295 mg/kg in the mouse and rat, respectively.

## **Packaging Information**

**CIPLACTIN Tablets:** Blister pack of 10 tablets

*Last updated: July 2012*

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