

Chlorpheniramine Maleate Tablets

Antihistamine Pet Medications for Dogs

Chlorpheniramine maleate has several important effects and thus several uses. Most obviously, this medication is an antihistamine and it is used for acute inflammatory and allergic conditions such as:

- Snake bites
- Vaccination reactions
- Blood transfusion reactions
- Bee stings and insect bites

Chlorpheniramine maleate is frequently included in antihistamine trials for allergic skin disease. It is not one of the more effective antihistamines in dogs but is one of the most reliably effective antihistamines in the cat (in one study 73% of itchy cats responded). Its availability and inexpensiveness make it worth trying in many cases.

Mast cell tumors are tumors involving cells that contain granules of histamine. Patients with mast cell tumors experience chronic inflammatory symptoms due to circulating histamine. Antihistamines such as chlorpheniramine maleate may be helpful given long term.

Chlorpheniramine maleate has a strong anti-nausea side effect, which makes it helpful in treating motion sickness.

Chlorpheniramine maleate causes drowsiness in animals just as it does in people and can be used as a mild tranquilizer. Some argue that it is the drowsiness side effect that makes this medication appear to be helpful in itch management (*i.e.*, patients scratch less because they are sleeping more.)

Convenient dosing makes it a common choice in the cat. It is often used in the management of feline asthma though its effectiveness in this condition is controversial.

Chlorpheniramine maleate is typically administered 2 to 3 times daily.

BACKGROUND

Histamine is an inflammatory biochemical that causes skin redness, swelling, pain, increased heart rate, and blood pressure drop when it binds to one of many H1 receptors throughout the body. Histamine is a very important mediator of allergy in humans, hence a spectacular array of different antihistamines has proliferated. Histamine, perhaps unfortunately, is not as important a mediator of inflammation in pets which means results of antihistamine therapy are not as reliable in pets.

SIDE EFFECTS

With so many possible uses of this medication, it is difficult to separate out a side effect from a primary effect. Drowsiness is generally regarded as an undesirable side effect.

At doses higher than the recommended dose, human patients complain of dry mouth and experience difficulty with urination. Animal patients experiencing dry mouth may drink more water.

Chlorpheniramine maleate is famous for bitter taste. Often the pet (especially cats) will tolerate the medication for a period of time but ultimately refuse to take it or even show salivation in response to administration. In such cases, it may be best to try a different medication.

INTERACTIONS WITH OTHER MEDICATIONS

In the treatment of allergic skin disease, antihistamines are felt to synergize with omega 3 fatty acid supplements and, as a general rule for this condition, it is best to use these medications together.

Chlorpheniramine maleate should not be used with additional tranquilizing medications.

This antihistamine is used in an assortment of human products where it is combined with pain relievers and antihistamines. These combination products should not be used in animals.

CONCERNS AND CAUTIONS

When using an antihistamine to prevent an allergic reaction (such as a vaccine reaction) the antihistamine works best when given prior to the allergen.

This medication will interfere with allergic skin testing. Check with your veterinary dermatologist regarding how far in advance this medication should be withheld.

Contraindications: hypersensitivity. Caution: narrow angle glaucoma, hypertension, GI or urinary obstruction, hypertension, hyperthyroidism, cardiovascular disease

Reproductive/Nursing Safety

In humans, the FDA categorizes this drug as category B for use during pregnancy (Animal studies have not yet demonstrated risk to the fetus, but there are no adequate studies in pregnant women; or animal studies have shown an adverse effect, but adequate studies in pregnant women have not demonstrated a risk to the fetus in the first trimester of pregnancy, and there is no evidence of risk in later trimesters.)

It is unknown if chlorpheniramine is excreted into milk; use with caution in dams nursing neonates.

Adverse Effects/Warnings

Most commonly seen adverse effects are CNS depression (lethargy, somnolence) and GI effects (diarrhea, vomiting, anorexia). The sedative effects of antihistamines may diminish with time. Anticholinergic effects (dry mouth, urinary retention) are a possibility.

The sedative effects of antihistamines may adversely affect the performance of working dogs.

Chlorpheniramine may cause paradoxical excitement in cats. Palatability is also an issue with this drug and felines.

Overdosage

Overdosage may cause CNS stimulation (excitement to seizures) or depression (lethargy to coma), anticholinergic effects, respiratory depression, and death. Treatment consists of emptying the gut if the ingestion was oral using standard protocols. Induce emesis if the patient is alert and CNS status is stable. Administration of a saline cathartic and/or activated charcoal may be given after emesis or gastric lavage. Treatment of other symptoms should be performed using symptomatic and supportive therapies. Phenytoin (IV)

is recommended in the treatment of seizures caused by antihistamine overdoses in humans; barbiturates and diazepam are avoided.

Drug Interactions

Increased sedation can occur if chlorpheniramine is combined with other CNS depressant drugs.

Antihistamines may partially counteract the anticoagulation effects of heparin or warfarin.

Laboratory Interactions

Antihistamines can decrease the wheal and flare response to antigen skin testing. In humans, it is suggested that antihistamines be discontinued at least 4 days before testing.

Doses

Note: Contents of sustained-release capsules may be placed on food, but should not be allowed to dissolve before ingestion.

Dogs

1. 4-8 mg (maximum of 0.5 mg/kg) PO q8-12h PO; many clinicians use as adjunctive treatment of chemotherapy of mast cell tumors

2. 4-12 mg (total dose) bid-tid

Itchy Skin Allergies: As a trial for pruritus in atopic dogs: 0.4-0.8 mg/kg bid-tid (0.18-0.36 mg/lb 2-3 times a day)

4. As a mild sedative: 0.22 mg/kg PO q8h; 4-20 mg (total dose per day) divided q8-12h

Cats

1. 2-4 mg per cat q12h PO

2. 2-4 mg per cat q12-24h PO

3. Most common dosage in cats is: 2 mg per cat bid-tid

4. For pruritus: 2-4 mg/ cat twice daily; rarely may be maintained on once daily dosing. Palatability may be enhanced by dipping the split tablet into tuna fish "juice", butter or petrolatum; placing split tablets into empty gelatin capsules or sprinkling or mixing timed release beads (partial contents of an 8 mg capsule) with food.

5. As a mild sedative: 1-2 mg per cat q12-24h (low dose), 2-4 mg/cat PO q12-24h (high dose)

Ferrets

1. 1-2 mg/kg PO 2-3 times a day

Storage/Stability/Compatibility

Chlorpheniramine tablets and sustained-release capsules should be stored in tight containers. The sustained-release tablets should be stored in well-closed containers. The oral solution should be stored in light-resistant containers; avoid freezing. All chlorpheniramine products should be stored at room temperature (15-30C).

Chlorpheniramine maleate is available in 2 mg, 4 mg, 8 mg & 12 mg tablets as well as oral syrup and injectable.