

Poison HOTLINE

1-800-222-1222

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Did you know ...

The IPCC has received calls regarding people ingesting veterinary formulations of ivermectin to prevent or treat COVID-19.

Ivermectin is an anti-parasite product designed primarily for farm animals. Oral ivermectin is FDA approved for use in humans to treat some parasitic worms and topical formulations are used to treat headlice and rosacea.

Formulations for animals are highly concentrated and may lead to toxicity when taken by a human. Overdose can cause vomiting, dizziness, low blood pressure, allergic reactions, ataxia, seizures, coma and even death.

Common ivermectin formulations for animals are apple flavored and therefore should be stored up and away and out of reach of children.

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Digoxin

Digoxin is the most prescribed cardiac glycoside and is used to treat atrial fibrillation, atrial flutter and congestive heart failure. Although effective in the treatment of these conditions, this drug can have dangerous side effects and cause both intentional (overdose) and unintentional (therapeutic errors) toxicity. Digoxin toxicity can be acute or chronic, and the symptoms and treatment are slightly different with each presentation.

<u>Acute Toxicity Symptoms</u>: Nausea, bradycardia, heart block, vomiting, abdominal pain, lethargy, shock, hyperkalemia.

<u>Chronic Toxicity Symptoms</u>: Nausea, anorexia, delirium, malaise, bradycardia, heart block, ventricular dysrhythmias, vision changes.

Laboratory Testing and Monitoring:

- -For an acute overdose, check digoxin level, electrolytes and EKG every hour.
- -Serum potassium is the best marker for severity of acute digoxin toxicity.
- -Perform continuous cardiac monitoring and follow renal function.
- -In chronic toxicity, digoxin level, electrolytes and EKG can be checked less frequently than in an acute overdose.

Treatment and Antidote

The antidote for digoxin poisoning is digoxin antibodies a.k.a. digoxin immune antibody fragment. The indications for treatment with digoxin antibodies are:

- -Severe toxicity e.g. ventricular dysrhythmias, progressive bradyarrhythmias, 2nd or 3rd degree heart block, refractory hypotension.
- -Hyperkalemia >5.0 mEq/L in an acute intoxication.
- -Ingestion of >10 mg in adult; >4 mg total or >0.1 mg/kg in a child.
- -Digoxin level >10 ng/ml by 6 hours post-overdose, even without symptoms.
- -Treatment thresholds for the elderly or chronically ill should be lowered.

There are multiple methods for dosing digoxin antibodies depending upon lab results, chronicity of toxicity and patient's symptoms. Contact the Iowa Poison Control Center at **1-800-222-1222** for advice on digoxin antibody dosing.

Hemodialysis does not remove digoxin. Multiple dose activate charcoal can enhance clearance, but should <u>only</u> be used in patients who can protect their airway, are fully awake and alert and if digoxin antibodies are not available.

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