

Common Toxicities

Sago Palm (Cycad toxicosis): These are large ornamental palms often used in residential gulf coast landscaping. The toxic principle, cycasin, is found in the seeds, fruit and base of the Sage Palm. Toxic to dogs and cats.

Clinical signs: vomiting within 3 hours of ingestion, abdominal pain, diarrhea, hind limb weakness, depression, coma and death within hours to days post ingestion.

Treatment: mainly consists of treating inflamed bleeding GI, liver failure, and preventing an inflammatory syndrome known as disseminated intravascular coagulation.

Chocolate (methylxanthines/theobromines): Chocolate is toxic to dogs and cats. Through a variety of mechanisms, chocolate causes changes in nerve cells, heart cells, and muscle cells that makes them overreactive to stimuli.

Clinical signs: restlessness, agitation, tremors, seizures, rapid heart rate, heart arrhythmias, vomiting and diarrhea.

Treatment: induce vomiting, activated charcoal to reduce absorption in GI, IV fluids to flush system, treatment of seizures/arrhythmias.

Anti-inflammatories (NSAIDs – Advil, Aleve, Aspirin, Ibuprofen, Excedrin, carprofen, etc.): NSAIDs can be toxic to dogs and cats. These drugs reduce blood flow and mucous production in the GI and kidneys leading to GI ulceration, perforation and kidney failure.

Clinical signs: lack of appetite, vomiting, diarrhea, drinking excessively, urinating excessively, lack of urination.

Treatment: IV fluids to flush system, GI protectants, anti-nauseants.

Tylenol/acetaminophen: Toxic to cats especially. FATAL!! This drug leads to hemoglobin damage and liver failure – often irreversible!

Clinical signs: act “like they’re drunk”, lethargic, weak, muddy gum color, purring, sleepy, lack of coordination, facial and leg and paw swelling.

Treatment: aggressive iv fluids to flush system, treatment for liver failure, i.e. denamarin, acetylcysteine, etc.

Rodenticides (rat poison): anticoagulant rodenticides (warfarin, brodifacoum, bromadiolone, diphacinone) bind up vitamin K in the body, which is essential for normal coagulation.

Clinical signs: often not obvious until severe – pale gums, weakness, internal bleeding, severe bruising.

Treatment: induce vomiting, activated charcoal, vitamin K1, monitoring clotting profile at 2-3 days post ingestion and again 3 days after last vitamin K.

Note: There are other rodenticides commercially available with different mechanisms of actions, namely Bromethelin which can cause brain swelling or cerebral edema which can be very difficult to treat. **It is very important to bring the actual package of rat bait if you come to the animal hospital to have your pet treated.**

Grapes/raisins: a fairly recently identified toxic agent in small animals. They cause acute kidney failure. As little as 0.7 oz/kg of grapes and 0/11 oz/kg of raisins can be detrimental.

Clinical signs: drinking/urinating more than usual, no urination, no appetite, vomiting.

Treatment: 48 hours aggressive iv fluids to flush system.

Xylitol: common artificial sweetener. Can cause problems in animals by inducing a large insulin release in the animal. This then causes a profound low blood sugar and low potassium level.

Clinical signs: weakness, profound hypoglycemia, arrhythmias, liver failure/necrosis, tremors, seizures, coma and death.

Treatment: induce vomiting, activated charcoal, iv fluids to flush system, iv glucose infusions, blood glucose monitoring, liver enzyme monitoring, liver failure treatment if needed.

Lily intoxication (not Lily of the Valley or Peace Lilies) – TRUE lilies (Lilium spp. and Hemerocallis spp. – Day lilies) ALL PARTS OF LILY ARE TOXIC TO CATS!! Any degree of exposure is potentially fatal!

Clinical signs: vomiting, anorexia, depression, dehydration, acute kidney failure.

Treatment: induce vomiting, activated charcoal, iv fluids for 48 hours, monitoring of kidney values. Fairly good prognosis if treated within 18 hours of exposure.

Ethylene Glycol (anti-freeze): Toxic to both dogs and cats. Causes kidney failure.

Clinical signs: stage 1 – lack of coordination, acts “drunk”, drinks a lot, urinates a lot; stage 2 (12 – 24 hours post exposure) – anorexia, vomiting, depression, low body temperature, coma; stage 3 (24 – 72 hours post exposure) – inability to produce urine, kidney failure.

Treatment: induce vomiting, iv fluids, ethanol in cats / 4-methylpyrazole in dogs, monitoring kidney function tests.