“Hops ingestion – Toxic to dogs?”

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Hops is a plant used in making beer. With the recent popularity of home brewing, hops are more accessible to dogs. What most owners are unaware of, though, is how toxic hops can be for dogs. There is minimal data in the literature about hops toxicity. Ingestion of hops causes Malignant Hyperthermia and is potentially lethal. Hops toxicity can occur both before and after the hops has been used for brewing beer. Home brewers often save the used hops, also called “spent” hops for compost piles, lawn fertilizer or bury it on their property. Hops should be placed in a sealed container for proper disposal.

How much hops can a dog ingest safely? Unfortunately, even small amounts of hops can trigger a reaction. Previously, it was implied that only Greyhounds were susceptible to hops toxicity. Then, Labrador Retrievers were added to the list. Now, there have been multiple reports of different breeds including Golden Retrievers and mixed breeds. It is evident that all dogs are susceptible and should receive aggressive therapy.

Clinical signs can occur within hours of ingestion. Often, the first symptom to become obvious to owners is heavy panting and restlessness. Marked hyperthermia is a hallmark for this toxicosis. Other symptoms include tachycardia, vomiting, abdominal pain and seizures. Blood work can reveal a metabolic acidosis.

Treatment should occur promptly as hops toxicosis often has a fatal outcome. Malignant hyperthermia can be treated with Dantrolene 2 mg/kg IV or Cyproheptadine 1.1 mg/kg oral or rectal administration. Other therapy includes enema, activated charcoal, IV fluids at 1.5-2 x maintenance, Diazepam for agitation or seizure control. There have been reports of rapid onset (within minutes) of rigor mortis after death.

References:
Duncan, K.L., Hare, W., Buck, W. Malignant hyperthermia-like reaction secondary to ingestion of hops in five dogs. JAVMA. 01/01/1997; 210(1):51-4.

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