ANTICOAGULANT RODENTICIDE TOXICITY (RAT POISON, RAT BAIT, D-CON)

What is it? Rodenticides are poisons used to kill rats, mice, and other rodents. These products interfere with vitamin K reserves in the body. Vitamin K is involved with blood clotting. When pets ingest rodenticides, their vitamin K stores become depleted, and they may bleed spontaneously or bleed to death if not treated rapidly.

What animals are affected? Dogs and cats can be affected. Rodenticide pellets or granules are often tasty to dogs and cats, so pets commonly ingest the poison when it is available to them. Toxicity is much more common in dogs, since cats have more discretion in what they eat! Rodenticides are the third most common toxicity reported in dogs.

What are the signs? Shortly after pets ingest rodenticides, owners may notice green or blue granules in the feces. The more dangerous symptoms of rodenticide toxicity may not be apparent for several days since it takes anywhere from 24 hours up to several days for vitamin K stores to be depleted. When vitamin K stores become depleted, spontaneous bleeding can occur. Symptoms might include weakness, pale gums and tongue, difficulty breathing, coughing up blood, nose bleeds, bleeding around the whites of the eyes, blood in the urine or stool, and unexplained bruising on the body.

How is it diagnosed? Rodenticide toxicity is diagnosed using a simple blood test to measure blood-clotting times. The Prothrombin Time (PT) and Partial Thromboplastin Time (PTT) tests measure a pet’s ability to clot. Both of these tests are often very prolonged after rodenticide ingestion. The PT test will become elevated before the PTT test becomes elevated.

How is it treated? If a pet recently ingested a rodenticide, vomiting may be induced to remove the poison from his or her stomach. Activated charcoal can be administered orally to help prevent further absorption of the toxin. Oral Vitamin K1 is prescribed if the blood clotting times are prolonged, if there is clinical evidence of bleeding, or if decontamination cannot be performed. There are several different classes of anticoagulant rodenticides, and some can affect blood clotting for several weeks. Vitamin K1 is often prescribed for 2-4 weeks. If severe bleeding has occurred, some pets need to be hospitalized for a plasma transfusion to replenish their blood clotting factors while waiting for vitamin K therapy to take effect. Whole blood transfusions or packed red blood cell transfusions may be needed as well if the pet is severely anemic.

What after care is needed? A PT test should be repeated 48-72 hours after completing a course of vitamin K. If the PT test is normal, no further therapy is needed. If the PT test is prolonged, an additional course of Vitamin K should be prescribed.

What is the prognosis? The prognosis is excellent if caught early. Pets can bleed to death if left untreated.

Can it be prevented? Yes! Preventing exposure is the best antidote. Keep rodent poisons out of your pets’ environment. Dogs and cats often find and ingest products that their owners felt were safely hidden.