



## **RODENTICIDE TOXICITY**

Of all the poisonings that are seen in emergency facilities, rodenticide toxicities are among the more common. There are many different mouse and rat poisons available. D-con is the most frequently ingested by pets. Dogs seem more likely to become poisoned than cats. Cats can be secondarily poisoned by eating a rodent that has died of rodenticide toxicity, but that is very rare.

### **How to the rodenticides work?**

The common rodenticides like D-con and Mouse-Pruf II exert their effect by interfering with an animal's ability to form blood clots by preventing the use of vitamin K in the production of clotting proteins. This results in uncontrolled bleeding, often internally. Such animals may hemorrhage into their eyes, brain, spinal cord, chest, lungs, abdomen, intestine, or skin.

A dangerous aspect of this kind of poisoning is that it takes from two to ten days after ingestion for symptoms to appear, and only a small amount of a rodenticide poison can be fatal to a dog or cat.

### **How is rodenticide poisoning diagnosed?**

It may be suspected in any animal that has pale gums, hemorrhages in the gums, nosebleeds, bruising around the eyes, bruising of the skin, difficult breathing, hemorrhage from the bowels, weakness, seizures, sudden blindness, or any abnormal bleeding following an injury or surgery. The diagnosis is based on the examination, history, and blood tests. These tests can include blood cell counts, measurements of the blood's clotting ability, and a specific test (PIVKA) for rodenticide poisoning. Radiographs (x-rays) can be important to evaluate chest and abdomen for hemorrhage accumulation.

### **How is it treated?**

If it is suspected (owner saw the pet eating rodenticide), treatment can prevent the symptoms from ever developing. This is why if you suspect your pet ate one of these poisons, immediate medical care is extremely important. Early treatment (within 3 hours) can include medicine to stimulate vomiting (emptying the stomach), activated charcoal (to adsorb poison still in the stomach), and vitamin K1.

If bleeding is already apparent, the prognosis for recovery becomes very guarded to poor. At this time treatment can include oxygen therapy, blood transfusions, intravenous fluids, vitamin K1 injections, and hospitalization.

### **Prevention is the best policy**

Any rodenticide should be stored or used in such a location that a curious pet or child can not have access to it. Again, if you suspect a pet has chewed on an open package or ingested even a small amount of mouse or rat poison, seek veterinary medical help immediately.

*Thank you for this opportunity to serve you!*