



RODENTICIDE – CHOLECALCIFEROL

ABOUT THE DISEASE

There are several different active ingredients in rodenticide but outwardly all appear the same. Rodenticides containing **cholecalciferol** (Vitamin D3) are one of the most potent mouse/rat poisons on the market. **Cholecalciferol** – activated vitamin D3 cause an increase blood calcium and phosphorous levels, untreated leads to kidney failure.

Common signs may not be evident for 1-3 days when the poison has already resulted in significant, potentially permanent damage. Symptoms include:

- Increased Thirst & Urination
- Weakness
- Lethargy
- Decreased Appetite
- Vomiting & Diarrhea

Acute kidney failure (please see acute kidney failure document for additional information).

OBTAINING A DIAGNOSIS

There is no point-of-care testing available for **cholecalciferol**, but tests exist for evaluating blood calcium and kidney values. However, in many cases it may take several days for calcium or kidney values to elevate. This means that many patients will need to receive blood work rechecks regularly through hospitalization or have to recheck daily or several times a week, for several weeks, to monitor the values.

TREATMENT

As with most toxicities, if caught within a few hours of ingestion, vomiting may be induced to evacuate the stomach. Also, **cholecalciferol** can bind to orally administered activated charcoal which is a common follow up treatment.

Aside from these decontamination efforts, there is no specific antidote for cholecalciferol, but a few medications are used in combination while a patient is hospitalized to reduce blood calcium levels.

The most challenging part of **cholecalciferol intoxications** is that treatment may span several weeks depending on severity of elevated calcium and/or kidney values. Bloodwork should be repeated every 12-24 hours for 72 hours in asymptomatic patients, and symptomatic patients need to be hospitalized and/or monitored until parameters are within normal limits.

TIPS FOR SUCCESS

- Contact the Pet Poison Helpline (855.764.7661) for immediate triage of toxicities.
- Seek immediate care for interventional therapies.