Did you know ……

Carbon monoxide (CO) has been called “a great mimicker” due to the symptoms of CO poisoning being diverse and non-specific.

The IPCC was called about a family of 4 whom the caller felt had developed food poisoning after eating out. The caller, spouse and 2 children all had various levels of headache, nausea, vomiting, dizziness and tiredness that started that evening. Our poison specialist, an experienced ED nurse, knew that these symptoms are also commonly seen with CO poisoning. The family was told to leave the residence and be evaluated by a HCP. There was no CO alarm in the home. Before the family returned home, a faulty furnace was found to be the source of CO. The home was “red tagged” until the unit was fixed.

Cholecalciferol:  
A Different Rodenticide With Increasing Use

The small paperboard boxes of aquamarine pellets or granules long used in households to combat infestations of mice or rats have been taken off the market. Those long-acting anticoagulants were banned in an effort to protect wildlife, children and pets from accidental poisonings. Starting in 2018 some products transitioned their residential rodenticides to a very different active ingredient – cholecalciferol, also known as vitamin D₃.

The new cholecalciferol bait does not come as hard pellets or solid blocks that had been used with the older rodenticides. Instead, the new “soft baits” have the consistency of firm molding clay and are individually shrink wrapped (see picture at right).

Cholecalciferol is an essential vitamin in people, dogs, and cats. Under normal circumstances, cholecalciferol promotes calcium retention and is necessary for other physiological functions. Excess cholecalciferol causes high calcium and phosphorous concentrations in the body, potentially leading to acute and severe kidney failure within 2-3 days. Soft tissues and organs in the body may start to calcify (dystrophic mineralization). The damage to the kidneys and other organs may be permanent.

Symptoms of Cholecalciferol Toxicity

0-24 hours: Increased thirst and urination; elevated calcium and phosphorus.
12-48 hours: Anorexia, vomiting, weakness, lethargy, melena.
2-4 days: Acute kidney failure.
3 -5 days: Depression, bloody diarrhea, hematuria, bradycardia, death.

There is no specific antidote. Monitor calcium, phosphorus and renal function frequently. Treatment is supportive care, IV fluids, and possibly the use of corticosteroids or a bisphosphonate such as pamidronate (Aredia®).

There are no scientific studies that tell us how much cholecalciferol needs to be ingested acutely to cause symptoms or problems. For cholecalciferol exposures, it is recommended to call the IPCC on a case by case basis.

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