

SNAIL PELLET POISONING

Definition:

Poisoning by ingestion of snail pellets (blue, green or red)

Signs:

Muscle tremors, salivation and seizures +/- vomiting and diarrhoea

Advice:

If ingested go to a vet ASAP as this is an emergency and treatment is required as soon as possible

OVERVIEW

There are 3 types of snail pellets which are poisonous for pets. Even brands which are promoted as 'pet friendly' are toxic and dangerous if chewed, swallowed or eaten.

1. Metaldehyde found in GREEN snail pellets
2. Methiocarb found in BLUE snail pellets
3. Ferric Sodium EDTA found in red/brown snail pellets

- Metaldehyde and Methiocarb poisoning primarily affects the nervous system and muscles; it causes seizures and muscle tremors
- Ferric sodium EDTA poisoning initially causes gastro-intestinal signs but can quickly escalate to severe liver failure
- Slug and snail baits—liquids, granules, wettable powders, or pelleted baits; baits also may contain other poisons (such as arsenate or insecticides)

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs (most common)
- Cats

SIGNS/OBSERVED CHANGES IN THE PET FOR METALDEHYDE AND METHIOCARB TOXICITY

- Anxiety and restlessness are early signs
- Excessive salivation/drooling (known as "hypersalivation") and/or vomiting or diarrhea may occur

- Wobbly, incoordinated or “drunken” appearing gait or movement (known as “ataxia”); may occur prior to or between seizures
- Muscle tremors
- Seizures—may be intermittent early, but progress to continuous seizure activity; not necessarily set off by external stimuli
- Markedly elevated body temperature (known as “hyperthermia”)—temperature 41°C up to 42.2°C common; probably caused by excessive muscle activity from seizures; hyperthermia may lead to a blood-clotting disorder (known as “disseminated intravascular coagulopathy” or “DIC”) or multiple organ failure, if uncontrolled
- Rapid heart rate (known as “tachycardia”) and deeper and more rapid breathing (known as “hyperpnea/polypnea”) than normal
- Between seizures—may note muscle tremors and anxiety; may be overly sensitive to sounds, light, and/or touch
- Short, rapid movements of the eyeball (known as “nystagmus”)—particularly in cats, or dilated pupils (known as “mydriasis”) are possible; the “pupil” is the circular or elliptical opening in the center of the iris of the eye; the “iris” is the colored or pigmented part of the eye

CAUSES

- Ingestion of snail pellets

RISK FACTORS

- Dogs that are known to scavenge and eat random items
- ‘Pet friendly’ snail and slug pellets and those containing a bittering agent
- Pets that live in an area with a high number of snails and slugs
- Snail pellet poisoning is found more commonly in coastal and low-lying areas, which have a higher number of snails and slugs than other areas

TREATMENT

HEALTH CARE

- Emergency inpatient intensive care, until tremors/seizures cease and elevated body temperature (hyperthermia) is controlled
- Monitor to prevent aspiration of vomitus into the lungs
- Fluids often are necessary to treat dehydration or acidosis (a condition in which levels of acid are increased in the blood)
- The veterinarian will control high body temperature with cool IV fluids, fans, enemas etc
- The veterinarian will attempt to decrease absorption of metaldehyde in pets that have no clinical signs or that have been stabilized with medications to induce vomiting (known as “emetics”) and/or administration of activated charcoal with a cathartic laxative
- In patients with clinical signs a general anaesthetic is performed to flush the stomach (known as “gastric lavage”), and to flush the lower gastro intestinal tract (enema) and administration of

activated charcoal to absorb any residual toxin in the gastrointestinal tract.

DIET

- Do not feed pets that are vomiting, having seizures, or are sedated heavily

MEDICATIONS

- Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive
- No antidote is available for metaldehyde poisoning
- Seizures may be controlled with diazepam, barbiturates, propofol and/or general anesthesia; in addition, a muscle relaxant (methocarbamol) or guaifenesin may be administered

FOLLOW-UP CARE

PATIENT MONITORING

- The veterinarian will periodically allow sedatives or anesthetics to wear off to reevaluate seizure activity
- Liver enzymes will be checked about 3 days later if large amounts were taken in

ACTIVITY

- Restricted, rest and confinement following treatment. Some patients can have a reoccurrence of symptoms if they over exert themselves.

PREVENTIONS AND AVOIDANCE

- Do not apply snail pellets in areas accessible to pets
- Some manufacturers dye the product green or blue to assist with identification
- Some states require manufacturers to adjust the formulation to decrease the tastiness (palatability) to pets by adding bitter taste but this does not always prevent ingestion

POSSIBLE COMPLICATIONS

- Liver and/or kidney dysfunction are possible several days after recovery from the initial signs and probably are sequelae to the seizures and elevated body temperature (hyperthermia)
- Aspiration pneumonia is a concern with any pet that has seizures
- Elevated body temperature (hyperthermia) may lead to a blood-clotting disorder (disseminated intravascular coagulopathy or DIC) or multiple organ failure
- Temporary blindness may occur

EXPECTED COURSE AND PROGNOSIS

- Prognosis—principally depends on the amount of metaldehyde ingested, time to treatment, and quality of care—prompt aggressive care provides a good to excellent prognosis; guarded to poor

prognosis with delayed or inadequate treatment, especially with large amounts ingested

- Death within 24 hours of exposure

KEY POINTS

- Do not apply snail pellets in areas accessible to pets
- Snail pellet poisoning is found more commonly in coastal and low-lying areas, which have a higher number of snails and slugs than other areas
- Emergency inpatient intensive care is necessary, until seizures cease and elevated body temperature (hyperthermia) is controlled
- No antidote is available for snail pellet poisoning
- Delayed or non-aggressive treatment may result in death within hours of exposure

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