

NOT QUITE NONTOXIC*

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Ingestion of silica gel packets
is usually associated with
a low risk of serious
side effects.



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This column focuses on some not-so-hazardous substances. This valuable information allows veterinary technicians to assess the real danger, as opposed to the perceived danger, from exposure to these substances.

PYRETHRINS

Pyrethrins are natural insecticides made from flowers of *Chrysanthemum* spp. Pyrethrin is often found in sprays, mousse, shampoos, and dips designed for use on cats and dogs. When used as directed, pyrethrin is safe. However, minor adverse reactions may occur even when the products are used as directed. Taste reaction, paw shaking, and ear twitching are most commonly reported. A taste reaction often alarms owners because profuse salivation generally occurs. Pyrethrins are bitter and may produce a tingling sensation in the mouth. In some pets, only a small amount of a product in the mouth may cause a reaction. Owners sometimes report that their pet is foaming at the mouth.

*Much of the information in this column came from the American Society for the Prevention of Cruelty to Animals Animal Poison Control Center Database: Unpublished data, Urbana, IL, 1998–2003.

A simple, tasty treat generally relieves hypersalivation. ASPCA Animal Poison Control Center (APCC) staff members recommend giving a small amount of tuna juice, milk, or canned food to help get the taste out of the mouth. This alleviates signs in most cases, although signs may recur if an animal grooms itself and additional product enters its mouth. To prevent grooming, the animal should be distracted until its coat is dry. If paw shaking or ear twitching occur or hypersalivation seems to be prolonged, wiping the product from the animal's coat with a warm washcloth may reduce or eliminate signs.


Synthetic Pyrethroids

It is important not to confuse natural pyrethrin with synthetic pyrethroids, such as permethrin, to which cats are very sensitive. Permethrin is commonly found in over-the-counter spot-on products for dogs. With permethrin exposure, cats may exhibit life-threatening signs.

MERCURY THERMOMETERS

More than a few canine companions have chomped on mercury thermometers. The major risk associated with this is foreign body obstruction and/or gastrointestinal (GI) perforation from pieces of ingested glass. Because the mercury in thermometers is poorly absorbed from the GI tract, the risk of mercury toxicity from oral exposure is low. Absorption of mercury from the skin is also limited. As a precaution when dermal exposure occurs, owners should bathe possibly exposed areas. Because mercury vaporizes easily, inhalation exposure is theoretically the greatest risk. However, the APCC has no documented cases of complications resulting from inhalation after a pet chewed a mercury thermometer.

Pet owners should contact their local public health or poison control official



to discuss safe cleanup and disposal of mercury in the home. Owners should never vacuum mercury from a thermometer. This would further vaporize the mercury and increase the chance of inhalation exposure to pets and humans.

SILICA GEL

Silica gel packets are often found in new packaging of shoes, electronics, and other items. They are designed to absorb moisture that the product would otherwise be exposed to. The packets usually state "Do not eat" or something similar. This warning label is often cause for concern to an owner whose pet has ingested the granules. However, when pets ingest silica gel granules or packets, there is little risk for serious side effects. GI upset may occur, especially in sensitive pets, but signs are usually easily managed at home without veterinary intervention.

It is important to find out where the silica gel packet originated. If the packet came from a medication vial, the packet may contain residue from the medication, and the risk from exposure to the drug should also be evaluated.

BIRTH CONTROL PILLS

Pets may ingest a single birth con-

trol pill left out by an owner or may chew into the container and ingest up to a month's supply of these drugs. The good news is that serious signs are unlikely from these exposures. These pills generally contain progesterone and estrogen. Iron may also be present in some birth control pills.

Exposure to progesterone does not generally cause problems. Even though high doses of estrogen may cause bone marrow suppression, it is unlikely that a pet would ingest a hazardous dose of estrogen from birth control pills. A toxic dose of estrogen is much more likely to occur from ingestion of hormone replacement therapy tablets.

When exposure to birth control pills occurs, the doses for both estrogen and iron should be calculated. When calculating the doses, it should be determined whether some of the ingested pills were placebos. Decontamination and treatment may be warranted if:

- The dose of estrogen is 1 mg/kg or more.
- The dose of iron is more than 20 mg/kg.
- The animal is pregnant or nursing.

ANTACIDS

Antacids frequently contain calcium, magnesium, and/or aluminum

salts. These tablets are usually flavored and may appeal to pets. Because GI absorption of these active ingredients is low, serious signs are unlikely. General guidelines include the following:

- If the exposure was relatively low (e.g., <25 tablets in a 30-lb dog), signs other than mild GI upset are unlikely.
- If a moderate number of tablets (e.g., 25 to 75 tablets in a 30-lb dog) were ingested, the pet may exhibit more intense signs of GI upset, such as vomiting, diarrhea, and/or constipation.
- If large amounts (e.g., >75 tablets in a 30-lb dog) were ingested, decontamination and treatment may be necessary.

CONCLUSION

The substances discussed in this column are considered to be low on the toxicity scale. However, it is important to evaluate each patient individually. Animals that are very young, very old, or have preexisting conditions may be more likely to have significant problems. Additionally, if an animal exhibits significant signs, it should be examined and possibly treated despite the low risk of serious side effects.

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