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TOPICAL FLEA PRODUCT TOXICITY

Fleas are frustrating and annoying insects that thrive on our pets, and getting rid of them is an important and sometimes difficult process. Fortunately, many products are available to reduce the flea population within our homes and on our pets. The most popular products include those supplied in small tubes that are applied to the back of the animal. This type of product generally lasts for about 30 days.

The most common types of insecticide used to kill fleas are pyrethrins. These products are derived from the chrysanthemum plant. When used according to label directions, pyrethrins are safe and effective. Synthetic insecticides have more recently been formulated to increase strength and effectiveness. The active ingredient in these synthetic-based insecticides is permethrin. Toxicity related to pyrethrins is usually associated with applying much more of the product than directed and using products labeled for dogs on cats.

Overdosing can cause toxic signs in both dogs and cats.

What to watch for

- Itchiness
- Drooling
- Lethargy
- Muscle Tremors
- Vomiting
- Seizures

Diagnosis

The diagnosis of permethrin or pyrethrin toxicity is based on physical exam findings as well as a recent history of topical flea product application. Although skin and hair tests can be done to confirm the presence of insecticide, those results may take several days.

Treatment

Treatment involves eliminating any existing product from the body and controlling seizures and muscle tremors. Expect your veterinarian to recommend hospitalization with continuous intravenous fluids. Additional recommendations for treatment may include:

- Bathing in a mild dish soap with lukewarm water to remove additional flea product from the pet's skin and reduce the amount absorbed
- Administering methocarbamol to treat muscle tremors. This may be given multiple times throughout the hospital stay.
- Administering diazepam or pentobarbital for seizure control

Home Care and Prevention

If you suspect your pet may have permethrin/pyrethrin toxicity, the most important part of home care is to bathe your pet in lukewarm water using mild dish soap. Do not use flea shampoo. Avoid hot water since that will dilate blood vessels in the skin and increase the absorption of the flea product.

Once the pet is bathed, contact your veterinarian or local veterinary emergency facility immediately. Additional treatment is probably required.

The best way to prevent toxicity to flea products is to read the labels and follow the directions.