## **Herpes Skin Lesions**

Feline herpesvirus (FHV-1) has been recognized as a possible, but uncommon, cause of ulcerative skin lesions in cats. Diagnosis may be made by identifying compatible histopathologic findings: epidermal, adnexal, and dermal necrosis associated with intranuclear inclusion bodies. In the absence of intranuclear inclusion bodies, the clinical and histologic appearance of lesions can mimic those of ulcerative facial dermatitis, eosinophilic plaques, and/or mosquito bite hypersensitivity.

In this study, 64 skin biopsy specimens compatible with FHV-1 dermatitis but without intranuclear inclusion bodies were tested for FHV-1 virus using both polymerase chain reaction (PCR) and immunohistochemistry (IHC) testing. Two cats were positive on both tests, while 10 cats were negative on IHC but positive on PCR. The 10 PCR-positive, IHC-negative



results were considered false-positive reactions, as IHC is considered the gold standard. When the study was conducted, markers for PCR testing that would discriminate between field strains and vaccination strains were not available. If live-attenuated virus vaccinations are used, false-positive reactions would make distinguishing them by PCR unfeasible.

## Commentary

The causes of ulcerative skin lesions in cats are too many to count; however, the most common involve self-trauma secondary to pruritus. Herpesvirus infection might be reasonable to consider if a lesion does not respond to treatment, but skin biopsy would be the first step to rule out other causes and narrow the differential diagnosis list. Herpesvirus would be only one of many possible causes but should be mentioned to the pathologist. Based on these study results, a negative PCR test can rule out FHV-1, but IHC is necessary for confirmation. As this study shows, availability of reagents that differentiate between wild strains and vaccine strains is key.—Karen Moriello, DVM, DACVD

### Source

Detection of feline herpes virus 1 via polymerase chain reaction and immunohistochemistry in cats with ulcerative facial dermatitis, eosinophilic granuloma complex reaction patterns and mosquito bite hypersensitivity. Persico P, Roccabianca P, Corona A, et al. *VET DERMATOL* 22:521-527, 2011.

# Beauty of Lilies Deadly to Cats

All parts of *Lilium* species and *Hemerocallis* species, including the pollen, are considered toxic to cats. Renal injury has occurred after what many owners considered minor exposure. Cats often develop vomiting or lethargy within 2 hours of ingestion. These signs may be transient, with many cats appearing to recover, only to deteriorate 24 to 72 hours later. Renal failure can follow and death can occur within 3 to 6 days.

A survey was conducted of cat owners who reported their cat's indoor lily exposure to the American Society for the Prevention of Cruelty to Animals (ASPCA) Animal Poison Control Center (APCC). A total of 57 cats were included in the study. Of the owners, 69% said they could recognize a lily and 27% knew they were toxic to cats before the exposure occurred. Owners who were unaware of lily toxicity often left the plants where the cats had access to them; plants were kept out of reach by owners who were aware of lily toxicity but their cats actively sought access to the plants.

Veterinary care was prompt for 93% of the cats; these were treated aggressively with decontamination and IV fluid therapy. Of the 55 cats with known follow-up data, 87% either developed no signs or

had brief signs that resolved and 11% developed renal signs. Three cats were subsequently euthanized because of renal failure. The best chance for successful treatment is aggressive IV fluid therapy within the first 18 hours after exposure; delay greatly decreases the chance for successful outcome.

### Commentary

This first published paper looking at a large number of cats exposed to lilies shows the need for continued education of the public about lily toxicity in cats. It also demonstrates that because some cats actively seek out plant material, owners should never bring toxic plants into the house. Based on the compiled data, most cats have full recovery with early decontamination and treatment—important information to know when recommending treatment to owners.—*Tina Wismer, DVM, DABVT, & DABT* 

#### Source

Exposure circumstances and outcomes of 48 households with 57 cats exposed to toxic lily species. Slater MR, Gwaltney-Brant S. *JAAHA* 47:386-390, 2011.

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