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CASE REPORT
Four cats with fungal rhinitis

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Fungal rhinitis is uncommon in the cat and cases of nasal aspergillosis–penicilliosis have been rarely reported. Signs of fungal rhinitis include epistaxis, sneezing, mucopurulent nasal discharge and exophthalmous. Brachycephalic feline breeds seem to be at increased risk for development of nasal aspergillosis–penicilliosis. Computed tomography (CT) imaging and rhinoscopy are useful in assessing the extent of the disease and in obtaining diagnostic samples. Fungal culture may lead to false negative or positive results and must be used in conjunction with other diagnostic tests. Serological testing was not useful in two cats tested. The cats in this study were treated with oral itraconazole therapy. When itraconazole therapy was discontinued prematurely, clinical signs recurred. Hepatotoxicosis is a possible sequel to itraconazole therapy.

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An 8-year-old, indoor-only, male castrated domestic shorthair cat weighing 14.5 lb (6.6 kg) was evaluated for sneezing and bilateral epistaxis of 3 weeks duration. A small amount of dried blood in the left nostril and a slight swelling of the left side of the nose were present. A complete blood count (CBC), serum biochemistry profile and total serum thyroxine (T_4) were within reference range. A cryptococcus latex agglutination antigen titer (IDEXX Laboratory, Totowa, NJ), feline leukemia antigen titer by ELISA (FeLV) and a feline immunodeficiency virus (FIV) antibody titer were negative. Thoracic radiographs were interpreted as normal.

The cat was anesthetized using ketamine (2.2 mg/kg IV) and valium (0.2 mg/kg IV) for induction and isoflurane for maintenance of anesthesia. Computed tomography (CT) was performed revealing a mass-like soft tissue density extending through the left nasal cavity into the nasopharynx. The mass appeared to be attached to the lateral nasal wall along the left maxilla. Mucosal thickening was apparent throughout the nasopharynx and into the caudal nasal recess. There was no apparent erosion of the left frontal bone, cribiform plate, orbital bone, and no invasion into the brain was noted. A round, white mass was visualized at the left choanae with a rhinoscope; a biopsy was taken using Poppin forceps. Histopathologic examination of the samples revealed a mild lymphocytic infiltration. Because these samples were considered non-diagnostic, a sinus trephination was performed of the left nasal sinus under general anesthesia. Biopsies were submitted for histopathology and bacterial culture. Histopathologic examination of the trephine biopsy specimen revealed multifocal and focally extensive neutrophilic, lymphocytic and plasmacytic rhinitis. Abundant exudate was present on the mucosal surfaces that consisted mostly of neutrophils and cellular debris. Numerous large colonies of thin-walled and branching fungi were present. These findings were consistent with marked chronic, active rhinitis presumably caused by fungal disease such as *Aspergillus* or *Penicillium* species. The culture revealed marked growth of *Pseudomonas aeruginosa*, sensitive to ciprofloxacin, amikacin and gentamycin. This infection was thought to be an opportunistic infection.

The cat was treated with ciprofloxacin, 5 mg/kg (2.3 mg/lb) body weight, PO, q 24 h for 21 days for the *Pseudomonas* species infection and itraconazole (Sporanox; Janssen Pharmaceutica, Tutusville, NJ) at 10 mg/kg (4.5 mg/lb) body

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