

FOCUS **Dynamic Upper Respiratory Obstruction in Cats**

Dynamic upper airway obstruction may be common in brachycephalic dogs, but it is rarely reported in cats. In this case of upper airway obstruction secondary to bronchial asthma, an otherwise healthy castrated domestic shorthair cat (2 years of age) was presented with acute history of increased respiratory effort, coughing, gagging, and voice change. Increased airway sounds were noted. CBC results revealed mature neutrophilia and eosinophilia, but findings were otherwise unremarkable. After transfer to a referral hospital, signs increased and several episodes of severe inspiratory respiratory distress ensued. An endotracheal wash was consistent with feline asthma, and CBC results showed eosinophilia. The cat was positive for *Dirofilaria immitis* antibody but negative for *D immitis* antigen. Sedated oral examinations, nasal CT, rhinoscopic biopsies, and tracheoscopy revealed no structural abnormalities. Various treatments (eg, oxygen therapy,

dolasetron, terbutaline, albuterol, fluticasone, dexamethasone) were administered, but upper airway stridor and dyspnea failed to resolve. On day 3, the cat went into severe respiratory distress. Emergency tracheostomy was performed; within 6 hours, the cat dramatically improved and was discharged on day 7. Oral medications at discharge included a tapering course of prednisone with albuterol, fluticasone, doxycycline, fenbendazole, terbutaline, and cephalexin. Six months later, the cat was clinically normal and receiving only fluticasone and selamectin. Increased inspiratory resistance from bronchial asthma can, rarely, lead to dynamic airway obstruction in cats.

■ Commentary

Feline asthma, a common intrathoracic obstructive respiratory condition, is caused by altered airway immunosensitivity. Alterations result in increased airflow



resistance secondary to increased airway hyperreactivity, increased mucus production, and smooth muscle hypertrophy consequent to lower airway inflammation. Common signs include dyspnea, tachypnea, orthopnea, paroxysmal coughing, and increased expiratory effort. Although expiratory dyspnea is more characteristic of lower airway obstructive disease, upper airway collapse with associated dynamic increased inspiratory effort can be a rare sequela to lower airway disease.—*Glenn Allen Olah, DVM, PhD, DABVP (Feline)*

■ ■ Source

Dynamic upper airway obstruction secondary to severe feline asthma. Davis A, Khorzad R, Whelan M. *JAAHA* 49:142-147, 2013.

FOCUS **Cyclosporine Tapering: Successful Practices**

Daily administration of cyclosporine at 7 mg/kg is efficacious for allergy-induced pruritus in cats; however, little is known about tapering this to the lowest dose necessary to control pruritus. Eighty-eight cats with hypersensitivity dermatitis received 4 weeks of cyclosporine at 7 mg/kg PO q24h. Dose tapering schedules were every other day and twice weekly. After the 4-week induction period at 7 mg/kg, the dose could be tapered to every other day in 70% of cats while still maintaining clinical remission. Up to 57% could have the dose tapered to twice weekly. The less frequent administration was associated with fewer adverse effects. The most common adverse effects were GI-related, but these were mild and did not require medical intervention. There was a trend toward transient

weight loss (attributed to transient GI disturbance), but all cats regained their weight at the study's end.

■ Commentary

Even if the underlying trigger of allergic dermatitis is identified, humane relief of pruritus is necessary. The most widely used drugs for this are glucocorticoids and cyclosporine. Veterinarians, well acquainted with dose tapering of glucocorticoids, could benefit from this study's information on cyclosporine dose tapering. The optimal treatment protocol is cyclosporine at 7 mg/kg PO q24h for 30 days before considering dose taper, then gradually tapering the dose to every other day for several weeks. If the cat remains in remission, it is reasonable to attempt administering the

drug twice weekly. When managing allergic cats, it is important to minimize possible flare factors. The two most common flare factors are ectoparasites (best managed by year-round flea and tick control) and recurrent microbial overgrowth (best managed by grooming hygiene). The need for daily baths is uncommon, but most cats with chronic allergic skin disease can benefit from some aid with grooming (ie, combing and brushing the coat) to help shed hairs and disperse skin oils.—*Karen A. Moriello, DVM, DACVD*

■ ■ Source

Dose tapering for cyclosporin in cats with non-flea-induced hypersensitivity dermatitis. Steffan J, Roberts E, Cannon A, et al. *VET DERMATOL* 24:315-322, 2013.

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