

## Allergies—Good Reason to Own a Pet?



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In this study, the association between exposure to cats or dogs during the first year of life and development of allergies to them was investigated in 566 teenagers (age 18, completed interviews, consented to blood samples for allergen-specific IgE). Parents and teenagers were asked about exposure to cats or dogs during the first year of life, at age 1 to 5 years, at 6 to 12 years, and at 13 years and older. During the first year of life, 184 of 566 (32.5%) teens had an indoor dog and 110 of 566 (19.4%) had an indoor cat. Males ( $n = 270$ ) living with a dog during the first year of life had half the risk for being sensitized to dogs at age 18 as compared with those without a dog. Teens born by cesarean versus vaginal delivery were less likely to be sensitized at age 18 if they lived with a dog in the first year

of life. Teens with an indoor cat during the first year of life had half the risk for being sensitized at age 18. The only critical period during which exposure to a cat or dog influenced sensitization was the first year of life.

**Commentary:** A previous study done by these investigators reported no association between indoor dog and cat exposure and overall allergy sensitization to 1 of 7 common allergens at ages 18 to 20.<sup>1</sup> In that study, total IgE was found to be lower when individuals lived with pets during infancy. In this report, the first year of life was a critical period during which exposure to indoor cat or dog allergens influences adult sensitization to the animals. The investigators hypothesized that pet ownership exposes infants to a more diverse population of bacteria that influence bacterial colonization of the GI tract and subsequent maturation and response of the immune system. In the first study, allergic sensi-

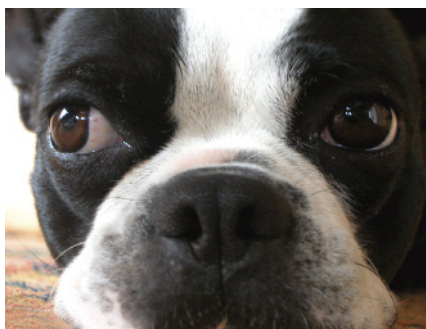
tization was less frequent in boys exposed to 2 or more dogs in the first year of life. This study likewise found sensitization was less frequent in teenage boys exposed to dogs in the first year of life. It is both interesting and entertaining to ponder this gender difference and the “protective nature of dog/cat hair.” Do young boys truly eat more dust and dog dander than young girls do? What is the critical mass of dog/cat hair for this protective effect? In all seriousness, veterinarians frequently face questions about pet allergies; however, we should direct clients to seek answers from their physicians.—Karen Moriello, DVM, Diplomate ACVD

Lifetime dog and cat exposure and dog- and cat-specific sensitization at age 18 years. Wegienka G, Johnson CC, Havstad S, et al. *CLIN EXP ALLERGY* 41:979-986, 2011.

1. Exposure to dogs and cats in the first year of life and risk of allergic sensitization at 6 to 7 years of age. Ownby DR, Johnson CC, Peterson EL. *JAVMA* 288:963-972, 2002.

## Phacoemulsification in Dogs

The primary goal of phacoemulsification is restoration or preservation of vision. Medical records for 103 dogs (179 eyes) that had undergone phacoemulsification with or without intraocular lens (IOL) replacement were reviewed. Presurgical evaluation included measurement of intraocular pressure, electroretinogram, and ocular ultrasound. Dogs with uveitis were treated and surgery was delayed until it was controlled; in dogs at higher risk for retinal detachment, retinopexy was performed before surgery. Dogs were pretreated with topical neomycin polymyxin dexamethasone (NPD) and an NSAID 3 days before surgery. IOLs were placed unless there was a contraindication for their use. Treatment with NSAIDs continued postoperatively for 2 weeks in most cases, and topical NPD continued for 2 to 6 months.



(6.7%). The majority of eyes were functionally visual (82.7%). Reduced vision was recorded in 13 eyes and blindness occurred in 18 eyes. Postoperative IOH was a significant risk factor for blindness. Boston terriers and poodles were more likely to have IOH when compared with mixed-breed dogs.

**Commentary:** Not all dogs with cataracts can be treated surgically, but phacoemulsification can certainly bring a new quality of life for both dog

and owner. When surgery is considered, this article is a nice review of some of the complications that clinicians should be aware of but also affirms that phacoemulsification and implantation of foldable acrylic IOLs have a good prognosis for vision.—Patricia Thomblison, DVM, MS

The most common postoperative complications were postoperative ocular hypertension (22.9%), corneal lipidosis (19.0%), uveitis (16.2%), intraocular hemorrhage (IOH, 12.3%), retinal detachment (8.4%), and glaucoma

Postoperative complications and visual outcomes of phacoemulsification in 103 dogs (179 eyes): 2006–2008. Klein HE, Krohne SG, Moore GE, Stiles J. *VET OPHTHALMOL* 14:114-120, 2011.

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