

WELL | FAMILY

Does Your Pet Need an Eye Doctor?

By SUSAN JENKS JUNE 6, 2017

When Kathy Ouelette's 98-pound Rottweiler, Bear, began bumping into things ("even into me," Mrs. Ouelette said), she knew something was wrong. Her veterinarian referred her to Dr. Daniel Priehs, an eye-disease specialist at Animal Eye Associates in nearby Maitland, Fla.

One of only about 400 veterinary ophthalmologists nationwide, Dr. Priehs determined that the dog had cataracts, a clouding in the eye's natural lens that, left untreated, can eventually lead to blindness.

After determining the delicate nerves at the back of the diabetic, 7-year-old dog's eyes could withstand surgery, Dr. Priehs implanted new lenses in a procedure strikingly similar to the cataract surgery performed in people. Within days, Bear seemed to have no trouble spotting the squirrels in his backyard, though he still requires daily eye drops to keep his eyes moist, said Mrs. Ouelette, a retired fiscal officer.

Animals share many of the 30 or so most common eye ailments identified in people, Dr. Priehs said, including injuries, infections, cataracts and glaucoma, as well as some rare and inherited ones.

But unlike their owners, pets cannot respond to eye charts for quick vision assessments, so determining that an animal has an eye problem can be difficult. Dr. Priehs likens his job to that of a pediatric ophthalmologist. "Pets can't tell us what's wrong," he said. "We look at the eyes and behavior."

Frequent squinting, clouding in the lens or cornea, gunky discharges or redness, as well as bumping into things, especially at night, can all be early signs of eye disease in pets, said Dr. Michael Paulsen, a veterinary ophthalmologist with the Animal Eye Clinic in Arlington, Tex. Not surprisingly, eye problems may be much easier to detect in dogs than in cats.

"Cats are quieter," and often mask vision loss by using their whiskers to navigate, Dr. Paulsen said. "Before we see them, they may be almost blind." Owners of cats and certain other pets therefore must pay particular attention to any changes in the eyes' appearance or signs of pain.

Dr. Priehs estimates that eye problems account for up to one in 10 visits to a veterinarian. And while he sees dogs most frequently, he has also treated flying foxes, walruses and even kangaroos at nearby Disney World. "Our biggest surgical successes are in cataracts," Dr. Priehs said.

Many more dogs than cats require treatment — either for inherited conditions, including cataracts or glaucoma, in high-risk breeds like cocker spaniels, basset hounds, poodles or terriers, or for acquired ones caused by trauma, infections or metabolic disorders like diabetes. Corneal wounds, affecting the clear surface at the front of the eye, and dry eye, which robs the eye of moisture and can lead to pain, inflammation and vision loss, are especially common in dogs.

Injuries can occur when owners let their dogs stick their heads out the car window while driving, which exposes the eyes to airborne dust and debris.

Heredity plays a far smaller role in the eye health of cats than of dogs, Dr. Priehs said, with most feline eye problems related to injuries from dust-ups with other animals or infections, especially with the herpes virus, which can hide out in the nerve cells of kittens exposed to the virus and erupt many years later. "It's exactly the same as shingles in humans," he said.

Should an eye problem arise, though, even if it's in a new pet, there's no need to rush off to a specialist, said Dr. Brady Beale, a veterinary ophthalmologist and clinical instructor at the University of Pennsylvania School of Veterinary Medicine in Philadelphia. Have your regular vet examine the pet first, she said.

Most family vets offer eye exams during annual checkups, and most can handle simple infections like conjunctivitis (pinkeye) and less serious eye injuries that can be managed medically. When to see a specialist depends largely on whether a pet needs surgery or there's an uncertain diagnosis.

A specialist can follow up with one or more tests. One, known as the Schirmer eye test, has been used since the 1800s in people and measures tear production for dry-eye problems. Another, a fluorescent eye stain, gauges the health of the cornea. A third test, tonometry, measures intraocular eye pressure for evidence of incipient glaucoma, or pressure buildup inside the eye.

The glaucoma test is the one a regular veterinarian might skip, given the machine's high cost, upward of \$3,000, according to Dr. John Sapienza, a veterinary ophthalmologist at Long Island Veterinary Specialists in Plainview, N.Y., who specializes in retinal reattachments, one of just six veterinarians in the country offering the service.

He sees mostly dogs in his practice, but having completed 12 years of professional training, including four years after vet school, he says, most veterinary ophthalmologists will treat "anything with an eye." In his case, that has included gorillas at the Bronx Zoo and Beluga whales at the New York Aquarium.

"We do it because most of us love working with animals," he says. "And, we have all these cool tools to play with."

Beyond cataract surgery, eye specialists perform a long list of procedures, like eyelid and retinal repairs, corneal grafts, and microsurgery involving tiny needles and thread that allow precise suturing of perforating wounds. Cornea transplants can also be done, though "in dogs, we do these to save an eye from rupturing to save vision — not to improve vision, as in people," Dr. Beale said.

Aided by the complete mapping of the dog genome in 2005, veterinary specialists are even moving into the field of gene therapy, pioneering new treatments in inherited disorders like Leber congenital amaurosis, a rare condition that causes blindness in puppies and young children.

Scientists first identified the responsible genetic error in dogs and have had some success treating both dogs and people with new gene therapies that shuttle healthy genes into individuals with the condition, said Dr. Gustavo D. Aguirre, a professor of medical genetics and ophthalmology in the School of Veterinary Medicine at the University of Pennsylvania.

Dr. Aguirre is a co-founder of OptiGen, an Ithaca, N.Y., company that provides DNA testing for eye disorders, mostly for dogs. Breeders have used the service, he said, to weed out genes for inherited eye disease in future generations.

None of these treatments are cheap. Cataract surgery for one eye runs about \$2,500, or \$3,500 for both eyes — even higher depending on where a pet owner lives. Mrs. Ouelette estimates that surgery and medicines for Bear, who continues to get regular checkups, have cost from \$6,000 to \$7,500. But it's money she and her husband believe has been well spent.

"After all, he's our boy," she said.

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