

Blindness

By Dr. Karen Becker

Hi, this is Dr. Karen Becker. Today we're going to discuss blindness. Blindness is partial or total loss of vision that can be present from birth; can occur suddenly as a result of an injury or illness; or it can come on gradually as a pet ages due to diseases such as cataracts, glaucoma, or retinal degeneration. Dogs and cats of any breed and any age can become blind, but it's more commonly seen in elderly pets.

Causes

Progressive retinal atrophy (PRA) is more common in cocker spaniels, border collies, Irish setters, Norwegian elkhounds, schnauzers, and poodles, and in Bengal, Abyssinian, and Persian kitties.

In addition to congenital (or from birth) blindness and gradual age-related blindness, there are several medical conditions of the eye that can ultimately lead to blindness in pets. Progressive retinal atrophy or PRA is an inherited disease that causes dogs, and to a much lesser extent kitties, to lose their eyesight over a period of months to years.

The retina, which is in the back of the eye, is composed of rods that perceive light and cones that perceive color. Normally the rods and cones mature by the time animals reach about 12 weeks of age, but in some pets, particularly dogs and cats, they never completely mature with PRA and may degenerate at an early age.

Sudden acquired retinal degeneration syndrome or SARDS generally strikes dogs between 7 and 14 years of age and is more common in female dogs. The syndrome causes total destruction of the rods and cones of the retina. The typical onset of SARDS is sudden – sometimes it happens literally overnight. There's often a dramatic increase in a dog's thirst and appetite in the weeks before blindness occurs.

Taurine deficiency in cats can also cause progressive retinal degeneration that often goes unnoticed until the condition is quite advanced. The damage to the rods and cones of the retina and the underlying tapetum lucidum cannot be reversed by taurine supplementation. This is one reason I often discuss the importance of a balanced, species-appropriate diet for cats that includes rich natural dietary sources of taurine like fresh meat.

In an autoimmune disease called uveodermatologic syndrome, a dog's body attacks its own melanocytes, which are the cells that produce pigment primarily in the skin and the retina as well as in the uveal tract of the eye. Usually, the first ocular sign pointing to uveodermatologic syndrome is uveitis, which ultimately leads to blindness.

Diabetes mellitus can cause blindness in dogs, and rarely, in cats. Other potential causes of blindness in both dogs and cats are untreated eye infections, an inflammation of the eye, glaucoma, cataracts, dry eye syndrome, infectious diseases, trauma to the eye, high blood pressure secondary to another issue or problem, stroke, cancer or another type of tumor located in the eye or brain, or sometimes a drug reaction.

Symptoms

Pets who experience a gradual loss of vision tend to compensate and adapt actually quite successfully, which makes it harder to detect when vision problems are happening. A sudden loss of vision, when your dog or cat suddenly becomes blind, it's very obvious.

But some of the signs that your pet may be losing his eyesight slowly include misjudging heights (you have kitties jumping from one object to another and then they miss); bumping into objects (sometimes dogs or cats, the junction between carpet and tile, they'll be a little weirded out by the transitions and surfaces); bumping into things; showing confusion (if you changed your surroundings like if you rearrange your living room, there's a reluctance to move or not be able to find normal spots, not be able to identify food and water bowls if you moved them); or general clumsiness (if your pet wasn't clumsy before) and disorientation, including being easily startled when you approach them as well as sometimes pets will rub their eyes or can squint. All signs potentially that your pet could be losing his or her vision,

You may also notice that your pet's eyes appear cloudy, discolored, or inflamed or that they're tearing or that their pupils are abnormally large.

Diagnosis

Diagnosis of a partial or complete loss of vision can be made with a thorough eye examination performed by a veterinary ophthalmologist.

Congenital blindness isn't something we can control, but many causes of acquired blindness in pets are entirely within your control. If your pet has an issue going on with his or her eyes, you need to go to the veterinarian. Keeping your pet at a healthy weight and feeding a low carb, species-appropriate diet will dramatically reduce the likelihood of diabetes in your pets, which can lead to blindness.

Allowing your dog to maintain her sex hormones as she's maturing may reduce the incidence of adrenal disease, which has been linked to SARDS. Feeding a fresh food diet that is high in antioxidants, including lutein, lycopene, vitamins C and E, as well as beta-carotene and astaxanthin, all which help nourish and support eye health throughout your pet's life, is a great idea. Examine your pet's eyes regularly, and make an appointment with your vet if her eyes change or look different or if you notice personality or behavioral changes in your pet.

Treatment and Care

There are also a lot of things you can do as the parent of a partially or completely blind pet to help your companion feel secure and comfortable at home. For example, avoiding moving furniture around is a really kind thing. Don't leave objects in hallways and avoid moving food and water bowls as well as bedding and litter boxes; keep them in the same place.

Keep your routine consistent, and even more important, make sure the environment where you have your pet in is safe. Make sure your pet has a safe spot she can access easily. For sure, you want to cover sharp corners or objects with something soft, so that there's no unnecessary trauma. Placing barriers or gates at the top and bottom of staircases is really important. Obviously if you have a pool, securing the perimeter of your pool is critically important and any area where your pet might fall. That also means that sometimes you have to carry your pet up and down stairs or keep those barriers at the top of the stairs, so he doesn't accidentally stumble.

You always want to supervise your visually impaired pet outside. When you enter a room where your pet is, avoiding to make loud sounds or startling your pet is important. You want to speak softly. Make sure that you let them know that you're there.

Rosco, my ancient Boston terrier, has lost about 80 percent of his vision and he's deaf. When he's sleeping (which he does all the time now) and I need to move him, because he can't hear, speaking softly doesn't matter. I just gently blow on him to let him know tacitly that I'm there because he can't see me. If I would touch him, he wakes up really frazzled and overwhelmed. I just blow on him and then he's able to wake up in a calmer state. That just helps keep his cortisol levels low, so he can feel comfortable in his environment even though his vision is not so great.

One exceptional resource I recommend to all my clients who have blind pets or pets that could be going blind is Caroline Levin's book *Living with Blind Dogs*. If you have a pet that is blind or you believe could be losing his or her vision, I really recommend that excellent resource.

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