

Eye Disease

Many diseases can affect the eyes in senior animals. These diseases can be caused by degeneration due to age, trauma, genetics, or secondary to systemic (whole body) illnesses. Simple aging changes in the eye include lenticular sclerosis and meibomian gland growths of the eyelids, which are described below.

Lenticular sclerosis occurs when the central zone of the lens in the eye becomes increasingly dense. The result is a blue/gray haze seen within the eye. Your pet's vision may be slightly decreased in areas of dim lighting. Lenticular sclerosis is not painful and does not require any treatment.

Meibomian gland growths (adenomas) are small, pigmented masses that occur in the eyelids. Fortunately, these tumors are usually benign. They may, however, become inflamed or protrude onto the eye surface, causing significant discomfort. Eyelid masses can usually be removed under general anesthesia with a local anesthetic block. Cryosurgical removal is another option for larger tumors. There may be mild swelling and bleeding for 2-3 days after surgery. Healing is usually uneventful. Rarely, these growths may recur.

Inherited eye diseases include, but are not limited to, **progressive retinal atrophy (PRA)**, glaucoma, and cataracts. PRA is a non-painful disease that affects the retina, initially causing night blindness. You may notice a reluctance in your pet to go outdoors at night, or down a dark hallway. This poor night vision will eventually progress to complete blindness. Breeds commonly affected by PRA include Cocker Spaniels, Labradors, Miniature Schnauzers, and Miniature Poodles. Although there is no treatment for PRA, most pets adapt well to their environment in spite of vision loss.

Glaucoma is a condition of abnormally elevated pressure within the eye globe. It occurs as a result of blockage of the drainage of the eye fluid, called **aqueous humor**. There are a multitude of causes for glaucoma, including high blood pressure, systemic diseases, aging changes, or tumors within the eye. You may notice your pet's eye(s) suddenly appearing red and seemingly very painful. Some animals will sleep more or stop eating due the pain. You may also perceive the eye(s) as "bulging". Some pets may only experience a slow loss of vision. It is very important to treat sudden glaucoma as an emergency, within 48 hours of onset if possible, to relieve pain and increase the chance of retaining some vision. Long-term medication in the form of eye drops and/or oral tablets can often control the increased pressure within the eye. Almost all animals affected by glaucoma become permanently blind.

Cataracts are white opacities within the lens that decrease overall vision. Cataracts may result from nutritional deficiencies, high blood sugar, toxins, genetic defects, or aging changes. Immature cataracts affect only part of the lens and can be difficult to distinguish from lenticular sclerosis. Mature cataracts involve the entire lens and appear as white pupils. Cataracts may or may not be associated with **uveitis** (inflammation within the eye globe), which causes redness in the eye. It is very important to have your pet screened for diabetes mellitus if a sudden onset of cataracts is observed, along with increased thirst and frequency of urination. A veterinary ophthalmologist can surgically remove cataracts if desired. Costs run from \$1500-3000 for removal of cataracts in one or both eyes, including rechecks, but not including initial blood testing or medications.

The most important aspect of diagnosing eye disease in pets is a thorough ophthalmologic examination. The cost of this specialized exam is \$85. Your veterinarian will evaluate eyelid structure, conjunctival tissue health, retinal appearance, general vision, tear production, intra-ocular pressures (glaucoma screen), lens appearance, and corneal health, as well as any abnormal growths. The costs of further diagnostic tests and appropriate medication or surgery will depend upon the diagnosis. Blood testing in conjunction with an exam will average \$150-200. Most topical ophthalmic medications average between \$20-60 per bottle. Please ask your veterinarian for a complete eye examination if you have any concerns about your pet's vision.

