CATARACTS AND CATARACT SURGERY IN DOGS

What is a cataract?
The lens of the eye is a crystal clear marble in the eye used for focusing images on the retina. A cataract is any opacification the lens. The opacity can be very small and not interfere with vision; or it can involve the entire lens and cause blindness where only light/dark and shadow perception remains.

What causes cataracts in animals?
Cataracts have many causes in dogs, and it is not always possible to identify the cause of cataracts in affected patients. Most cataracts in dogs are inherited and can occur at any age and any breed (mixed breeds included). Different breeds of dogs have different characteristics of age of onset, location within the lens, and extent and rate of progression. The second-most common cause of cataracts in dogs is diabetes mellitus. Almost every diabetic dog will develop cataracts, most within the first year of being diagnosed as diabetics. There are many other causes of cataract including those secondary to trauma, retinal disease, and nutritional.

What causes cataracts in animals?
Cataract surgery remains the only effective way to resolve a cataract. No drop therapy has been proven to reverse those changes and resolve a cataract in humans or pets.

Surgical removal of cataracts offers a predictable means to restore vision to our patients. Cataract surgery can give a dog a wonderful new lease on life. For a blind dog to again be able to see its owner, to play with toys, and look out the window at the squirrels is life-changing for canine patients and their owners. Restoration of vision can make a huge difference in quality of life.

If both eyes are affected, surgery may be performed on both at the same time. Animal patients require general anesthesia to have cataract surgery.

Cataract surgery is performed so routineliy in animals now that intraocular lenses (IOLs) exist for dogs to give them the best vision possible after surgery.

What happens if I decide not to pursue cataract surgery?

In some cataracts, escape of lens proteins into the fluid chambers of the eye will induce an immune-mediated inflammatory response in the eye termed lens-induced uveitis or LIU. LIU, in turn, can lead to glaucoma, retinal detachment, and/or lens dislocation (separation of the lens from its anchoring attachments), allowing the lens to float around inside the eye and cause damage and pain). If severe or untreated LIU may damage an eye such that cataract surgery is no longer an option.

As such, medical therapy is warranted to control or prevent inflammation from cataracts. This therapy does not improve vision or resolve the cataract, but provides the best therapy to make sure the visually impaired eye remains comfortable.

How well will my dog see after cataract surgery?

Normal vision is the goal of cataract surgery with IOL implantation. Not every dog is able to receive an artificial lens, which is determined intraoperatively. However the function of both animals with and without intraocular lenses far exceeds that of an animal blinded by cataracts. The vision in either case is more far sighted than a normal pet.

Why is cataract surgery so expensive?

Cataract surgery is costly because it requires specialized instrumentation, supplies, anesthesia, and training (a minimum of 3-4 years). In veterinary medicine most pet owner bear 100% of the cost of cataract surgery. Pet health insurance policies will often cover the cost of the surgery if not excluded as a preexisting condition in your pets medical record/policy. If you have health insurance for your dog, you cannot assume it will cover cataract surgery—check with your insurance provider in advance.

What preoperative tests are performed prior to cataract surgery?

The first step is to have your pet examined by an ophthalmologist to determine if your pet is a good candidate for surgery; pre-operative testing includes a preoperative blood profile, comprehensive physical exam, and assessment of anesthetic level of risk. Electroretinography (ERG), ultrasonography of the eye, gonioscopy (glaucoma risk test), blood pressure measurements are undertaken at our hospital the morning of surgery. These tests are non-invasive and are performed with the patient awake, and cause no discomfort. These test ensure the health and functionality of specific structures in the eye to ensure cataract surgery will be beneficial to your pet prior to anesthesia and surgery. These results are reviewed with you and then surgery is pursued the same day if desired.

What happens after cataract surgery?

Cataract surgery is an outpatient procedure. Your pet will not need to spend the night at the hospital.

After surgery, recheck exams are typically scheduled the next day, 2 weeks later, 1 month later, and 3 months later. Biannual exams are recommended after that. The goal of these rechecks to limit the amount of medication required by your pet and stay on any early changes of complications that could develop.

Typically pets are on 1-2 oral medications for the first two weeks, wear a cone for 2 weeks, and receive eye drops at a 4 time a day frequency. The eye drop frequency is tapered over time and long-term many pets can stop all drops.

What are the risks involved with cataract surgery?

Cataract surgery is a predictable procedure, with success rates that approximate 90%, but a small percentage of dogs will not regain good vision due to complications, and (worst case scenario) may actually be permanently blind in one or both of the operated eyes. Complications of cataracts and cataract surgery both include:

- Glaucoma. Glaucoma (increase in eye pressure) can develop anytime following surgery and untreated can lead to blindness. This complication also can occur without cataract surgery as the presence of cataract is a significant risk factor for developing glaucoma.

- Retinal detachment. Separation of the retina from the back of the eye and its blood supply is a potentially blinding complication of cataract surgery that occurs in a small percentage of patients. While surgical re-attachment of the retina is possible, the procedure is only performed by a select number of individuals (~10 in the United States). Retinal detachment can occur without cataract surgery as the presence of cataract is a significant risk factor for developing a retinal detachment.