

Cataracts and cataract surgery







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What is a Cataract?

A cataract is an opacity of the lens which prevents light from entering the eye, often resulting in blindness.



What is not a Cataract?

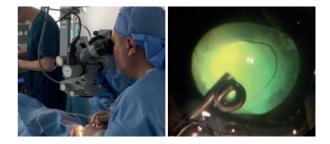
All geriatric dogs develop a hardening of the lens ("nuclear sclerosis") that causes the lens to have a blueish-grey appearance. This does not usually interfere with vision and is commonly confused with a true cataract, but is a normal part of the ageing process.

Why did my dog develop a Cataract?

- Most cataracts in dogs are inherited. The cataract may develop rapidly over weeks, or slowly over years, in one or both eyes.
- Like humans, dogs also develop cataracts with age (often after 8 years of life).
- Cataracts in dogs can also develop for other reasons such as trauma, diabetes, or in orphan puppies on an artificial milk replacer diet.

How are Cataracts treated?

Once a lens has developed a cataract, there is no known method to make the lens clear again. There are a number of products marketed on the Internet for treating cataracts – despite the claims made there is **no evidence** that these expensive medications are useful. Cataracts can however be treated by surgically removing them.



The procedures and equipment used to remove cataracts in dogs are the same as those used in humans. A small incision is made in the eye and a hole is made in the capsular bag that holds the lens. Phacoemulsification is then performed, in which a special probe ultrasonically emulsifies and removes the cataract. After the entire lens is removed, an artificial replacement lens, called an intraocular lens or IOL, is usually placed in the capsular bag. The eye is closed with extremely small sutures. Because even the slightest damage to structures in the canine eye can have disastrous effects, the surgery is performed under high magnification using an operating microscope. If both eyes are affected, both eyes are usually operated on under the same anaesthetic.

How well will my dog see after Cataract surgery?

After successful cataract surgery dogs can often see close to normal. However, we cannot give dogs perfect vision. This is because only a handful of different IOLs are available for dogs and an exact replacement of the original lens is not possible. Furthermore, dogs have more inflammation in their eyes after surgery than humans and therefore have more scarring. This scarring may slightly decrease vision. **Most owners notice a** tremendous increase in their pets' vision after cataract surgery, but they may still detect certain visual difficulties which are more marked where it has not been possible to place an IOL.

After surgery, cataracts cannot recur. However, some dogs can have decreased vision years after cataract surgery due to scar tissue, glaucoma, or retinal detachment. Where it is not possible or advisable to use an IOL, vision will usually be dramatically improved, however the eye will be more far-sighted (meaning close objects will be out of focus).



Why is Cataract surgery so expensive?

The total cost depends in part on any complications present prior to surgery or arising after surgery, but also on how quickly the eye recovers from surgery. Some patients will be off all treatment by one month after surgery, whilst other patients may require treatment for the rest of their lives. The surgery requires specialized, expensive equipment and training. The instruments used for cataract surgery in dogs are the same instruments used for cataract surgery in people. Furthermore, you are paying for the advanced training of a Veterinary Ophthalmologist and their team and the 24/7 aftercare your pet will receive.

What if Cataract surgery is not done?

Immature and mature cataracts can cause a serious reactive inflammation inside the eye (Lens Induced Uveitis, or LIU) that must be medically treated, whether or not surgery is performed. If surgery is not performed, lifetime anti-inflammatory eye drops may be required, as well as periodic eye re-examinations. LIU can lead to complications such as glaucoma or a detached retina, and LIU decreases the success rate of cataract surgery. **There is a best window of time in which to perform surgery. The earlier the cataract can be removed, the better.**

What is involved in having Cataract surgery performed on my dog or cat?

The first step is to have your pet examined by one of the ophthalmologists at the eye clinic to see if they are a good candidate for surgery. A pre-operative blood profile, comprehensive physical exam, and assessment of anaesthetic level of risk is then performed. If your pet "passes" these tests, electroretinography (ERG) and gonioscopy testing are scheduled at our clinic as inpatient procedures. They are performed under sedation or a short general anaesthetic, and cause no discomfort. ERG testing evaluates retinal function, as it is vital that the retina (the "film in the camera") is working, in order to perform cataract surgery. Gonioscopy is a test to try and determine if the eye(s) are at increased risk of developing glaucoma post-operatively. If they are, additional medications will be prescribed and these medications may need to be administered for your pet's lifetime. Ultrasonography of the eye(s) is also performed to measure the size of the lens and to look for complications such as a pre-existing retinal detachment. If your pet "passes" these tests, surgery can be scheduled. We try to treat the eyes for at least seven days of medication immediately preceding the surgery day. This is not always possible and surgery is sometimes advised guicker than this. On the day of surgery, your pet will need to arrive at the clinic early in the morning or the night before to receive intensive eye treatment before surgery. The surgery is performed and your pet is then hospitalised at our Veterinary hospital at Bradley Stoke for at least 2-3 days for continued intensive medical treatment

and observation. It is sometimes necessary for repeated anaesthetics to be required during this period to address any complications which may arise. Your pet will not have eye patches. Vision usually improves during the first week but can be expected to improve significantly over a 4-5 week period. Most dogs exhibit no pain after surgery. Your pet will require oral medication and several kinds of eye drops three to six times a day for the first few weeks after surgery, and on a lesser frequency for several months post-surgery.

Your pet may be required to wear a cone-shaped restraint collar (E collar) the first two weeks after surgery to prevent self-trauma to the eyes. We usually ask that you bring your pet back for re-examinations at one week, two weeks, one month and three months post and every six to twelve months thereafter. This re-examination schedule may change if there are post-operative complications or concerns.

What are the risks involved with Cataract surgery?

Cataract surgery is a highly successful procedure, but there are risks. Chances of your pet having improved vision after surgery are often high (85 - 90%). But 10-15% of dogs may get complications, and be permanently blind in one or both of the operated eyes or even need to have the eye/s removed. Some cases will have additional risk factors which make this success rate over optimistic - the ophthalmologist will discuss these if they are identified during the pre-operative screening process. Common complications include:

- Scar tissue. All dogs develop some intraocular scar tissue. Excessive scar tissue will limit vision.
- Glaucoma. Glaucoma (an increase in eye pressure) occurs in up to 30% of all dogs who have cataract surgery which can occur months to long years after surgery. Glaucoma not only can cause complete vision loss, but also may require the need for additional medications or surgery. It can be painful and cause LOSS OF THE EYE if uncontrolled.

- Retinal detachment. Whilst re-attachment is sometimes possible, the success rate is low and this complication usually results in complete vision loss.
- Intraocular Infection. Whilst it is rare, it can cause LOSS OF THE EYE (i.e. surgical removal of the eye) as well as complete vision loss.
- General anaesthesia. Anaesthesia safety has progressed tremendously during the last decade. However, even healthy pets have anaesthesia problems. We take anaesthesia seriously and use only the latest and safest medications at our clinic. All pets are monitored extensively by our surgical staff.

Although the thought of complications can be worrying the potential benefits of returning vision to a much loved pet can be enormous. Returning or saving sight is truly one of the greatest gifts we can offer our pets.

If you have any further questions regarding this or any other condition feel free to contact us.

Rowe Referrals

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