



Cataract Surgery



What is a cataract?

A cataract is an opacity within the lens, and can lead to a loss of vision (see Cataract Factsheet).

How do we remove a cataract?

The surgical technique used to remove a cataract is the same that is used in people. A small (2.8mm) incision is made at the edge of the cornea, and through that, a window is cut in the front of the lens. An ultrasonic probe is then inserted into the lens and vibrates at high frequency to break up the lens (phacoemulsification).

The cataract fragments are then removed leaving an empty capsular bag.

An artificial (prosthetic) intraocular lens is injected through the corneal incision into the remaining lens capsule. The lens has been designed to restore clarity of sight, as well as prevent the regrowth of the cataract across the lens capsule. We have now inserted hundreds of these lenses over the past years and they are successfully maintaining a clear visual pathway.

Occasionally it is not possible to insert an artificial intraocular lens if the lens capsule is unstable or if a large part of the capsule has been damaged by the cataract.

In such cases the patient will still be able to see after the surgery, but vision will be more blurred than if an artificial lens has been inserted. We always aim to insert an artificial lens whenever possible because the patient will be able to discern small objects in their environment much more readily.

How successful is cataract surgery?

The success rate of cataract surgery in dogs is high with a positive visual

outcome in approximately 90% of patients. However, cataract surgery in dogs is more prone to complications than in people since the canine lens is larger than our own and the canine eye will react more intensely to surgical intervention. The two main serious complications are glaucoma and retinal detachment.

Glaucoma is the term used to describe increased intraocular pressure and may develop due to post-operative inflammation inside the eye, blocking the outflow of fluid. There is a risk that the eye may develop glaucoma months or even years after the surgery. In order to minimise the risk of glaucoma post-operatively we recommend applying topical anti-inflammatory medication before and after the surgery.

The eye is also at risk of retinal detachment following cataract surgery which can prove blinding.

Although the risk of developing retinal detachment or glaucoma post-operatively is low, and the conditions are potentially treatable, both could result in a permanent loss of vision.

What happens prior to cataract surgery?

Once cataract surgery has been arranged, drops and sometimes oral medications will be prescribed, to ensure that there is no inflammation or infection in the eye. Cataract patients can be fed up to and including the evening before the surgery, and water can be left down for them to drink overnight prior to their operation, but they must not be fed on the morning of the operation.

If your dog is diabetic, please do not give them any breakfast on the morning of the surgery and do not administer any insulin. We will monitor blood glucose levels while the patient is with us and we will resume their insulin post-operatively. We ask that owners of diabetic patients bring their dog's insulin, needles (or insulin pen), normal food, and a schedule detailing the daily routine and insulin dosage.

What happens on the day of the operation?

Do not administer medication on the morning of the operation, but please bring it with you to the clinic. We will provide you with an admission time to attend the clinic and you will be required to read and sign a consent form. The patient will be prepared for theatre and given a mild sedation, and surgery will usually follow

shortly after. We will telephone you following the surgery and provide further updates during the recovery process.

Patients are either hospitalised overnight, to go home the following day, or if they can be returned to your care on the day of surgery, they will need to be re-examined within 24hrs.

What happens after the operation?

It is normally necessary to apply topical medication to the eye several times per day, and administer oral tablets once or twice daily. All dogs must wear a protective shield ("Elizabethan collar") for at least one to two weeks to prevent self-trauma and it is important to avoid vigorous play and exercise.

Patients are re-examined one week post-operatively, and if they are making good progress, a re-examination will be scheduled 2-4 weeks later. The regularity of the re-examinations will depend on individual factors and will be discussed following surgery. If the patient continues to make good progress then the topical medication will be gradually reduced over time, and we will offer 6 monthly assessments to ensure that we can continue to provide the best possible advice for long-term success.