

# Iris Cysts

# What is an iris cyst?

Iris cysts are round pigmented lesions that originally float freely in the front of the eye. They come from the back of the iris – which is the pigmented tissue inside the eye. The reason why some dogs develop iris cysts is not understood. Iris cysts are harmless and are not related to pigmented cancer (melanoma) inside the eye.

# How are iris cysts diagnosed?

Most dogs with iris cysts are presented to their vet when the owner has noticed it as it has grown to a large size – or as it has been noticed to be floating within the eye. Eventually, the cysts become 'stuck' on the innermost layer of the cornea. Usually, the absolutely round shape suggests that the lesions are true cysts rather than pigmented tumours and most vets are quite happy to make the original diagnosis 'iris cyst'. However, an eye specialist can tell an iris cyst apart from a melanoma by using a special ophthalmic instrument called a 'slit lamp'. Eye specialists can also see if more small cysts are present but still hidden and they can judge how much (if at all) the iris cysts are obstructing vision.

### Why has my dog developed iris cysts?

The cause of iris cysts is not clear and most dogs with iris cysts have no other eye problems that would have caused the iris cysts.

## Are iris cysts a problem for my dog?

In themselves, iris cysts are entirely harmless. Small cysts usually sit in the front 'bottom' of the eye and are rarely noticed until they grow to a size where they reach the pupil. Small cysts also can float freely – so if you turn your dog on his or her back, you may see the cyst float from bottom to top of the eye.

However, some iris cysts can grow to a large size and can become stuck to the inside of the cornea (the clear window of the eye). If this is the case, then they can deposit pigment on the cornea – which can reduce sight. Some dogs also grow multiple cysts and again, these might cause corneal clouding and reduce eye sight. In rare cases, the cornea will go opaque in the area where it is touched by a cyst and spontaneous corneal wounds (ulcers) can occur. In select breeds, such as the American Bulldog and the Great Dane, iris cysts have been associated with high pressures (glaucoma). Fortunately, we rarely see this here in the UK.





Iris cysts – above right a single cyst which does not affect the pupil. Above left a patient with multiple cysts whose sight is negatively affected by the cysts.

#### How are iris cysts treated?

It can be a conundrum whether to remove iris cysts or not as single or small cysts rarely cause a problem. However, removal is easiest and can be done non-invasively at that early stage. Leaving the cysts to grow larger risks that they will already have caused patches of permanent clouding on the cornea and it usually means that a more invasive way for removal is required.

On balance, if iris cysts are small and single/few, then we often do nothing and simply monitor the eye with a view to removing the cysts if they grow. However, if cysts are large or multiple and threaten to affect vision, then we recommend removal. This is always done under general anaesthesia but can be done in one of three ways:

- 1) By laser this is entirely non-invasive (meaning we do not have to go into the eye). This method is restricted to small cysts only;
- 2) By removal with a needle this involves going into the eye with a fine needle to suction the cysts gently out of the eye. This is again often restricted to one or two cysts per eye only
- 3) By removal with automated irrigation and aspiration this involves making a 2.8 mm cut into the eye to remove the cysts with automated suctioning. This is the method we would recommend for dogs with multiple cysts.

Your surgeon also may have a preference which technique to choose and will discuss with you which option is most suitable for your dog.





Above left an eye immediately prior and then after the removal of multiple iris cysts and above right immediately afterwards.

Small bits of pigment remain present on the lens but the majority of the cysts has been removed.

### What is the recovery from iris cyst removal?

If the cysts have been removed by laser, there is no recovery period at all and your dog will be back to normal the day after the operation. The same applies to removal by a fine needle, which also causes minimal upset to the eye. If there were multiple cysts and if we had to make a small cut into the eye to remove the cysts with automated suction, then it will take a couple of weeks before your dog can go back to normal exercise and a protective collar may be required. A 10 days course of antibiotic and anti-inflammatory eye drops is given to these patients.

#### What can go wrong with iris cyst removal treatment?

Iris cyst removal is a very safe procedure but the risks of general anaesthesia do of course apply. With laser treatment, focal scarring of the cornea can occur in very rare cases.

With needle aspiration and automated suctioning, there is a small chance of retinal detachment, bleeding and infection. A small cataract (lens opacity) could develop if the lens is inadvertently damaged during the procedure. Again, the risk for these complications is extremely small.

