



## *Lens Luxation*

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The lens is located in the central region of the eye where its purpose is to transmit and focus light onto the retina at the back of the eye.

The lens is anchored in place by numerous fibres, called lens zonules. If these fibres break down, the lens begins to drift from its central position. Lens luxation occurs when all of these fibres are broken and the lens becomes loose within the eye, where it can move forwards or (less commonly) backwards in the eye.

### **Lens Luxation**

Lens luxation is an inherited condition in dogs that typically affects the terrier breeds (most commonly the jack russell terrier) and the Lancashire heeler. In cats it is usually a consequence of inflammation within the eye (uveitis).



### **Signs**

The first sign is wobbling of the lens which is very difficult to notice without experience and suitable equipment. More commonly, the first sign to be noticed by the owner is a sudden onset of eye pain, clouding, and redness of the 'white' of the eye. The dog may hold its eye shut and there may be a watery discharge. Lens luxation is an emergency and the dog should be referred to an ophthalmologist without delay. When the lens luxates, the pressure inside the eye rapidly rises to cause glaucoma and blindness, which is irreversible without urgent treatment.

## **Treatment**

Initial treatment consists of pain relief and anti-glaucoma treatment to reduce the ongoing damage to the retina and optic nerve. Following this, under general anaesthesia, surgery is performed to remove the lens from the anterior chamber. A relatively large incision is made at the edge of the cornea and the lens is removed in its entirety. Occasionally, in very early cases, the lens can be removed using a high frequency ultrasound probe (this is called phacoemulsification).

Lens luxation is an inherited disorder, and the lens of the other eye is also likely to become affected, usually within weeks or months. For this reason, we may advise its removal before it fully luxates. Alternatively, we may prescribe preventative treatment with eye drops that constrict the pupil to help prevent the lens falling forwards (if we do this, it is vital that the drops are given twice daily every day, and that you stop the drops and contact us if the eye becomes suddenly painful). In advanced cases of lens luxation, when the eye is irreversibly painful and blind, removal of the eye may be advised.

## **Aftercare**

Following removal of the luxated lens, your pet should regain useful vision, but because the eye no longer has a lens inside it, vision will not be as good as previously. Without a lens, the eye is severely long-sighted. Objects will appear out-of-focus and slightly larger than normal, and it will take some weeks for your pet to get used to this.

Their distant vision is usually better than their close vision, and they may have some problems in locating objects close by. However, they usually learn to cope reasonably well. Even following successful surgery, it is important to remember that serious potential postoperative complications are still possible, including retinal detachment and glaucoma.

*To reduce the risk of such complications, we recommend regular (3-6 monthly) checkups and in some cases we may dispense long-term medication.*

