

LENS LUXATION/SUBLUXATION

The lens is held in its normal position behind the iris and pupil by tiny strands called “zonules”. Disruption of the zonules can cause the lens to move out of its normal position (luxate). When a lens is only partially held by some zonules, it is referred to as a subluxated lens. When a lens is no longer held by any zonules, it is called a luxated lens. A luxated lens can fall forward into the anterior chamber (anterior lens luxation) or backward into the vitreous (posterior lens luxation).

Two general categories of lens luxation are defined according to whether or not the luxation was the first eye problem (primary lens luxation) or whether it was caused by another eye condition (secondary lens luxation). Certain breeds of dogs such as Terriers, Miniature Schnauzer, and Cocker Spaniels develop primary hereditary lens luxation, in which the lens zonules weaken and rupture. Primary lens luxation usually involves both eyes, although not necessarily at the same time.

Secondary lens luxation can be due to trauma and other eye diseases such as glaucoma or uveitis. Trauma severe enough to cause lens luxation usually also causes other obvious eye problems. Elevated pressure inside the eye (glaucoma) or inflammation inside the eye (uveitis) can cause the zonules to weaken and the lens breaks free. Sometimes when a patient is seen with multiple eye problems for the first time, it is difficult to tell which problem came first-the luxated lens or another eye condition!

Conversely, a luxated lens can also cause glaucoma and/or uveitis, two painful and blinding diseases. Treatment of a luxated lens depends on the general health of the eye, the position of the lens, and whether or not the patient can still see out of the affected eye. If the lens is loose but still behind the iris, medications that constrict the pupil in order to trap the lens in its proper position can be used. Anterior lens luxation, in which the lens has moved in front of the iris, is regarded as a surgical emergency. It is a vision threatening condition that must be treated immediately. Clinical signs often seen with anterior lens luxation include corneal cloudiness, redness, squinting, and tearing. If glaucoma is present, enlargement or swelling of the eye may be noticed.

Surgical lens removal is done under general anesthesia with the use of an operating microscope. Postoperative care involves the use of topical and oral medications, and your pet must wear an E-collar for 2-3 weeks. The corneal sutures are absorbable and do not need to be removed. Without a lens, the eye will be farsighted and at an increased risk of developing a retinal detachment.