9901 South U.S. Hwy 17-92 Maitland, FL 32751 407-629-0044 *Ext. 1* 407-629-0602 *Fax*

11011 Lake Underhill Rd Orlando, FL 32825 407-629-0044 Ext. 1

AnimalEyeGroup.com



Daniel R. Priehs, D.V.M. Diplomate, A.C.V.O.

Heidi M. Denis, D.V.M. Diplomate, A.C.V.O.

Melanie Church, D.V.M. Diplomate, A.C.V.O.

CANINE LENS LUXATION

Lens luxation is dislocation of the lens inside the eye. The lens is suspended inside the eye by small fibers called zonules. If the zonules break, the lens can become partially dislocated (subluxated) or completely dislocated (luxated). When the lens is completely dislocated, it may fall into the front of the eye (anterior luxation) or into the back of the eye (posterior luxation). A lens luxation may be primary (spontaneous) or secondary to other problems in the eye.

Primary lens luxation

Primary lens luxation occurs due to an inherited weakness or degeneration of the lens zonules. The condition occurs mainly in the terrier breeds. Spontaneous lens luxations are also seen occasionally in other breeds. With primary lens luxation, both eyes are at risk for dislocation of the lens.

Secondary lens luxation

Secondary luxations occur as a result of another eye problem, and may involve only one eye. Possible causes include:

- Inflammation inside the eye
- Glaucoma
- Trauma to the eye
- Congenital (present at birth) deformities of the lens
- Idiopathic, which means there is no known cause

Signs

9901 South U.S. Hwy 17-92 Maitland, FL 32751 407-629-0044 *Ext. 1* 407-629-0602 *Fax*

11011 Lake Underhill Rd Orlando, FL 32825 407-629-0044 *Ext. 1*

AnimalEyeGroup.com



Daniel R. Priehs, D.V.M. Diplomate, A.C.V.O.

Heidi M. Denis, D.V.M. Diplomate, A.C.V.O.

Melanie Church, D.V.M. Diplomate, A.C.V.O.

Anterior lens luxation result in discomfort and signs that can be recognized by the owner. With subluxation and posterior luxations, signs are often not apparent. Signs may include the following:

- Sudden change in the appearance of the eye
- Squinting, holding the eye closed and increased tearing or blinking
- Redness and/or cloudiness

Diagnosis

Diagnosis is made by a complete ophthalmic exam. The pressure in the eye is also checked (tonometry), as lens luxation can cause or result from glaucoma. An ocular ultrasound may be done to check the stability of the retina, as lens luxation can cause the retina to tear and detach.

Treatment

The treatment of lens luxation varies depending on the location of the lens, the presence of other eye diseases, and the potential for vision. The main goals of treatment include lowering the pressure within the eye if it is high, surgical removal of anterior luxated lenses, and treatment of underlying causes. Anterior lens luxations are considered emergencies.

Home Care

If surgery is done to remove the lens, the eye is monitored closely for proper healing. The two complications seen most often after surgery to remove a luxated lens are glaucoma and retinal detachment. Both are vision threatening. Chronic monitoring for glaucoma is important because many of the breeds of dogs that are prone to lens luxation are also prone to glaucoma.

Monitoring the lens position is also important if the lens is loose, but still in place. It is important to watch for signs of lens shifting such as redness, eye swelling, pain and squinting. If a primary

9901 South U.S. Hwy 17-92 Maitland, FL 32751 407-629-0044 *Ext. 1* 407-629-0602 *Fax*

11011 Lake Underhill Rd Orlando, FL 32825 407-629-0044 *Ext. 1*

AnimalEyeGroup.com



Daniel R. Priehs, D.V.M. Diplomate, A.C.V.O.

Heidi M. Denis, D.V.M. Diplomate, A.C.V.O.

Melanie Church, D.V.M. Diplomate, A.C.V.O.

lens luxation is diagnosed in one eye, the other eye must be closely monitored for lens luxation also.

Most cases of lens luxation cannot be prevented. Affected dogs should not be used for breeding purposes.