

# “Cherry Eye” or prolapse of the gland of the third eyelid.

## What is the third eyelid?

Unlike humans, most animals have a third eyelid (monkeys, snakes and most fish do not). The third eyelid or nictitating membrane is a structure located in the inside corner of the eye. It contains a T-shaped cartilage. The nictitating gland (also called the accessory lacrimal or third eyelid gland) surrounds the base of this cartilage and cannot normally be seen. The functions of the third eyelid are to protect the eye and distribute the tear film. The nictitans gland also contributes significantly to the tear production.

## What is a “cherry eye”?

The name “cherry eye” refers to a prolapse of the nictitans gland. Once prolapsed, the gland is exposed to the air, dust and infectious agents. The gland will then become irritated and inflamed and appears as a red swelling in the inside corner of the eye. There is usually tear overflow as the tears cannot get to their normal drainage site. Mucus will be produced by the inflamed conjunctiva and this can become secondarily infected, resulting in a yellow discharge. The condition can occur in one or both eyes.

This term “cherry eye” has been adopted as it looks like a red cherry in the corner of the eye.



Typical appearance of a “cherry eye” in the right eye of Bulldog puppy

## What is the cause of “cherry eye”?

The nictitans gland is normally deeply seated behind the orbital rim. For reasons that are not completely understood, the gland sometimes flips up. It is believed that the prolapse of the gland is due to an unusual laxity or weakness of the tissue surrounding the eyeball so is more often seen in dog breeds with droopy eyes. The swelling occurs because of the chronic exposure.

## Is my pet predisposed to “cherry eye”?

Prolapse of the nictitans gland usually affects young dogs (less than 2 years old). It is common in American Cocker Spaniels, Beagles, English Bulldogs, Lhasa Apsos, Pekingese and Shar Peis but can occur in any breed. There is no sex predilection which means that males and females are equally at risk. It often occurs in both eyes in predisposed dogs, but it can be days, weeks or months between the two eyes being affected.

In cats, the condition is quite uncommon and can occur at any age. It has been mostly described in Burmese and domestic short-haired cats.

## What are the treatments?

The best treatment for “cherry eye” is to surgically replace the gland into its normal position and anchor it with sutures to the deeper tissues of the eye socket under general anaesthesia. Various techniques are described. The technique used on your pet will be chosen depending on its age and conformation and is also often a matter of the surgeon’s own preference.

A few years ago the treatment of choice consisted of removing the gland, which was quick, easy and cost effective. Since then, it has been proven that the gland is responsible for up to one third of the tear production. Gland removal predisposes the dog to the development of dry eye later in its life (see "dry eye" information sheet). Once tear function is compromised due to gland removal, the only treatment is either frequent daily applications of artificial tears for the rest of the dog's life or to perform a parotid duct transposition (PDT) (see PDT information sheet). ***GLAND REMOVAL IS THEREFORE NOT ADVISED.***

Topical treatment to control inflammation and prevent infection is not an alternative to surgery although used prior to surgery, it can help to decrease the swelling, make repositioning easier and decrease the risk of recurrence. Occasionally, it is possible to manipulate the gland and replace it without surgery; however the majority of these will reoccur within hours.

#### **How do I care for my pet following the surgery?**

Your animal is usually able to go home the day of the surgery. Recovery is normally uneventful. It is not abnormal for the eye to be swollen or red, which will usually resolve after a couple of days. In some cases the eye may remain pink and a mucous discharge may be present until the sutures have completely dissolved. In most cases, topical antibiotic ointments will be used for one or two weeks after surgery, as well as anti-inflammatory tablets. Some dogs need to wear a buster collar for a few days to prevent them from rubbing their eye(s). It is not normal for the eye to be sore/squinting, persistently red or to have a yellow/green discharge. If that

is the case, you should contact your veterinary surgeon promptly.

#### **What are the complications of a "cherry eye"?**

Once prolapsed, the gland undergoes inflammation and irritation, which causes discomfort. Your dog may then try to rub his eye. Unfortunately, this may cause complications such as corneal ulceration, or trauma to the gland or eyelids.

When left exposed, the gland will become fibrotic (scarred), atrophy (become smaller) and lose its capacity to produce tears. The consequences are the same as gland removal. Untreated "cherry eye" therefore also leads to dry eye (see "dry eye" information sheet). Surgery is therefore more successful when performed soon after the cherry eye is noticed.

#### **What are the complications following the surgery?**

When surgery is performed promptly, the gland should regain its normal function quickly. As with any operation, complications may occur – these include gland re-prolapse, infection, cyst formation and suture-related problems. The operation can be repeated if the gland re-prolapses; re-prolapse is more common in certain breeds such as Mastiffs and Bulldogs, and in animals which have already had one failed operation prior to referral.

The 'pocket' technique is successful in 90% of cases when performed by an experienced surgeon, using the correct sized suture and with careful suture placement.

**If you have any further questions do not hesitate to contact the Ophthalmology department at Rutland House Referrals on 01744 853510.**