

# **KERATOCONJUNCTIVITIS SICCA**

### What is Keratoconjunctivitis sicca?

Keratoconjunctivitis sicca, also called KCS or dry eye, is due to a deficiency in tear production. The deficiency may be mild to severe, temporary to permanent. The problem may be gradual in onset, or very rapid. It usually affects dogs, but cats can also develop KCS.

### What are the signs of KCS?

A thick, sticky mucous discharge from the affected eye is most owners notice. This discharge improves temporarily with almost any treatment placed in the eye, but recurs when the treatment is stopped. The area surrounding the eye is usually red, and the cornea (the clear part of the eye that is like a window) may become heavily scarred, causing blindness. Most animal are uncomfortable and will demonstrate this by rubbing their eyes and face. They also frequently squint.

#### What causes KCS?

There are many causes of KCS, including drug reactions, viruses and immune-mediated disorders. Many breeds have a high incidence of the disease, leading us to suspect it may be inherited on some breeds. English Bulldogs, Cocker Spaniels, West Highland Terriers, Lhasa Apsos and Pugs are among the most commonly affected breeds, but any pet may develop this problem. Removal of the gland of the third eyelid may also be associated with the disease.

## How is KCS diagnosed?

The tear production is measured by placing a small, special strip of paper over the eyelid. This measurement, along with the clinical signs, helps confirm the diagnosis.



### How is KCS treated?

The best treatment is to stimulate new tar production. This is done using drugs called Cyclosporine or Tacrolimus. They are very effective, but can take 4-8 weeks to see the maximum effect. Side effects are rare, but sometimes the pet may indicate a "stinging" sensation by rubbing the eye after administration. Other medications may include artificial tears and ointments to provide lubrication, as well as antibiotics and anti-inflammatories to decrease infection and scar tissue formation. The key to controlling KCS is diligent administration of the prescribed medication. The most common cause of treatment failure is not following treatment instructions or skipping doses of the Cyclosporine or Tacrolimus.

### **How long does KCS last?**

Depending on the cause, it may be a temporary problem which will improve with time and treatment. However, it is usually a permanent problem that cannot be cured, only controlled. If the problem is permanent and does not improve with medical therapy, there is a surgical treatment which may help. The surgery is called a parotid duct transposition, or PDT. A PDT may help some pets, but can have several complications. For this reason, a PDT is only done after all medical treatments have been exhausted.

### What is the outcome of KCS?

If left untreated, the animal will be uncomfortable and may be permanently blinded. Therefore, it is extremely important to follow all instructions and return for regular checkups, so that the progress may be monitored and therapy adjusted as needed.