Chronic superficial keratitis (CSK)

Chronic Superficial Keratitis (CSK) or Pannus is a condition in which the cornea (the clear dome in front of the eye) becomes inflamed. In many dogs, the third eyelid and part of the conjunctiva (white part of the eye) may also become involved. This condition is particularly common in Greyhounds and German Shepherd dogs, though dogs of other breeds may be affected.

Signs noticed by owners are a red, irregular appearance to the normally clear cornea. Most commonly the lower outside area of the cornea is first affected, but in severe cases the whole cornea may become involved and cause visual impairment. If the third eyelid is affected, its edge that is normally pigmented (coffee color), starts becoming depigmented. The condition generally is not painful, but if it continues untreated it may lead to blindness through scarring and blood vessel in-growth of the cornea.

CSK is immune-mediated, meaning the dog’s immune system, which normally fights infections, acts abnormally and begins attacking / rejecting the cornea. Treatment for affected dogs involves using eye drops containing medications to suppress the immune system of the eye surface. Both topical steroids and cyclosporine have been shown to be effective in treating CSK. In severe cases with extensive corneal pigmentation and scarring, surgery may be recommended to remove the affected surface layers of cornea to improve vision.

Sunlight exacerbates the clinical signs seen in CSK. Owners should expect their pet to need more frequent administration of the eye drops during the summer months. Any measures that can be taken to decrease direct exposure to sunlight will help. Dogs should have access to shade at all times. Owners may try fitting their dogs with sunglasses (Doggles) or visors. Dogs affected with CSK should be rechecked two to three times yearly to make sure the disease remains under control. One of the recheck examinations should be in the summer months.

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Same eye 4 weeks after medical treatment