

PANNUS

(Chronic Superficial Keratitis)

WHAT IS PANNUS?

Pannus is a slow progressive degenerative disease of the cornea (the clear surface of the eye). Pannus is characterised by brown or pink tissue on the surface of the eye which leads to a slow loss of vision. The condition is most commonly seen in German Shepherds, but occasionally is seen in other breeds as well.

WHAT CAUSES PANNUS?

The actual cause of pannus is not known, although several factors are thought to be involved:

- Hereditary predisposition (i.e. German Shepherds)
- Ultraviolet radiation may play a role as an inciting agent and cause worsening of the condition. Dogs living at high altitudes often are more severely affected.
- Immune factors are believed to contribute to the severity of the disease. i.e. it could be an allergic reaction to materials outside the body or the body may be reacting against the corneal tissue itself.

WHAT ARE THE SIGNS OF PANNUS?

Initially, redness and brown pigment may be seen in the sclera (the white of the eye). White infiltrates made up of inflammatory cells then invade the clear cornea, followed by blood vessels. Finally, pink connective tissue grows into the cornea and later becomes brown. If left untreated, this condition can severely impair vision and even cause blindness.

WHAT IS THE TREATMENT FOR PANNUS?

Despite intensive research efforts, no permanent cure exists for pannus. However, in the vast majority of cases, pannus may even be reversed and the corneas will clear. The key is instituting therapy early in the disease process. The inflammatory cell infiltrate and blood vessel invasion are generally reversible with therapy. The connective tissue infiltration and pigment deposits are often not reversible once they have occurred.

Medical Treatment

Cyclosporin is a new medication in the war on pannus. It comes in the form of drops which need to be placed in the eyes numerous times daily to start, then gradually weaning down the frequency to the lowest possible dose that will control the symptoms.

Cyclosporin only works well, however, when used in conjunction with topical steroids. Steroids may be used alone to control pannus, but a combination of the two drugs seems to give the best results. *****It is important to understand that this is only a treatment, not a cure, and will need to be used forever. Even short periods of interrupted treatment (i.e. 2-4 weeks) may cause a severe relapse with worsening of the dog's vision. Once the condition is under control, most dogs can be maintained on the drops**

once or twice a day, sometimes even every other day. It is of utmost importance that you follow the ophthalmologist's instructions with respect to recheck appointments - we are unable to prescribe repeat prescriptions if the doctor has not examined your pet to ensure the drops are controlling the condition adequately. Initially, frequent rechecks are required, but once the drops have halted the progression of the pannus and your pet is on the lowest possible dose, rechecks are only needed once per year.***

Surgery

Surgery may be used when medication does not completely clear the pannus from the cornea. A “peeling” of the cornea may be required to restore vision in eyes that are severely scarred and pigmented. Unfortunately, this is also only a treatment and not a cure, therefore, drops will still need to be used to prevent the disease from recurring as the cornea heals. This method is only used if medical treatment is insufficient.