

Vet's Corner

Pannus or Superficial Stromal Keratitis

Greyhounds are relatively well off compared to many breeds when it comes to eye disease. In NZ I see Pannus as a problem in some dogs, but the incidence is still very low compared to the total number of dogs in NZ. The other more sporadic problem is retinal disease, which we have associated with poor worming practice and non hygienic rearing conditions.

Pannus is a chronic progressive disease of the canine cornea. It typically begins as an invasion by blood vessels and inflammatory cells of the more superficial cornea at position 3 or 9 o'clock. Both eyes are usually affected but the degree of involvement may not be identical in each. After initial ingrowth of blood vessels and inflammation, pigment cells (brown) invade the cornea. Focal grey spots or a greyish band is often present in the clear cornea adjacent to the edge of the lesion (this is a fat deposition in the cornea). As the active red lesion advances, pigmentation usually increases and vision is affected to a variable degree, depending on the extent of corneal involvement. Often the first clinical signs noticed by the owner are a deficit in the dog's lower visual fields, if the lower 2/3 or more of the cornea are affected.



In advanced cases the entire cornea may be thickened and pigmented with little visible blood vessel ingrowth. In some cases the front surface of the third eyelid may be pigmented and thickened. The rate of progress of lesions is quite variable with rapidly progressing lesions in young animals responding well to treatment.

It may seem quite bizarre, but there are a number of disease conditions in both animals and humans, where there is a reaction of the body against itself. These are called immune mediated or autoimmune diseases, because the immune system is the major player in this battle.

Effectively, antibodies produced by the body result in destruction of a specific organ. Examples include reaction against ones skin (blistering diseases), blood elements eg red blood cells (anaemia) and many others.

The eye is no exception to this situation. Pannus or Superficial Keratitis is one of these diseases.

At the present time Pannus cannot be cured. Control with preservation of useful vision is the goal.

It is fair to say that this is a difficult problem to treat in some dogs, but can be very rewarding in most. Remember we are only **controlling a problem not curing it** as we don't recognise yet the precise cause. Initially with treatment the time commitment is great, but invariably treatment frequency can be reduced to a level which is more practical and cost effective.

Craig Irving ■

