

Greyhound Eye Disease - Pannus

Pannus is a disorder that affects the eye of the greyhound, and will eventually lead to blindness if not managed. It is not painful in its early stages, causes no discharge from the eye, and may be hard to see unless you look closely at your greyhound's eyes in good light. If it is not diagnosed or treated, the disease progresses, slowly covering the clear part of the eye (the 'cornea') until the dog can no longer see.

Pannus is seen most commonly in German Shepherd Dogs, but is also found in Collies, Poodles, Dachshunds (sausage dogs) and Greyhounds. There is thought to be a significant genetic inheritance, with certain families and lines within a breed more severely affected, but environmental factors also play a part in the development of the disease.

Given that *pannus* is a chronic medical condition requiring lifelong medication and veterinary care, greyhounds that are showing signs of *pannus* are not accepted into the Greyhound Adoption Program (GAP), regardless of how early in the disease they are. Unfortunately, due to the relatively late age of onset, it is possible that a GAP greyhound could develop this disease **after** the adoption process is completed, so it is certainly something you need to watch out for.

So what does it look like?

Pannus symptoms generally start to appear when the dog reaches 2-5 years of age. In the beginning you may only notice that the edge of the cornea seems more pigmented (coloured) than before – kind of like 'freckles' developing near the edge of the eye – or there may be a hazy/greyish colour to the edge of the clear part of the eye. Generally the disease will occur in both eyes, starting at about the same time, but the lesions do not necessarily look the same.

FACT SHEET

As the disease progresses, *Pannus* lesions may simply look like brown pigment 'growing' onto the eye surface, or it may appear more inflamed with a 'greyish-pink' colour (which is the eye's version of scar tissue). If you look closely, you might even see small blood vessels growing onto the eye surface. The colour change to the clear part of the eye starts out the outside edges and spreads in until the entire eye surface is covered, leaving no clear window for light to enter the eye – making the dog blind.

What causes it?

Pannus is thought to be an auto-immune disease. This means the body actually starts to attack itself. The genetic predisposition to develop *pannus* is inherited – so it tends to affect certain breeds and certain families within these breeds more than others.

The other factor thought to contribute to *pannus* is exposure to Ultra-Violet (UV) light. This exposure to UV light is thought to trigger the start of the reaction, or to make the reaction worse, so it is important to keep affected dogs out of bright light, especially in the summer months when the UV level is high. Even if exposure to UV light is not the cause of the disease, the rate of progression increases with exposure to high levels of UV light (from sun light, or reflected light from water).

Can it be treated?

Once the disease has started, there is no 'cure' that completely eliminates *pannus*. All treatments are directed at slowing the progression of the pigmented lesions and to prevent 'flare-ups'. The most commonly used treatment is cortisone eye drops, which are administered daily. The cortisone slows the immune reaction that causes the pigment, and hence slows the progression of the disease. Cortisone may also be combined with *cyclosporine* drops which also help control the symptoms.

Your veterinarian or veterinary ophthalmologist will be able to monitor your greyhound's eyes, and prescribe the most suitable treatment. They will want to check your dog's eyes regularly to ensure that they are not flaring up or getting worse.

Should Greyhounds with *pannus* be bred from?

Ideally, no greyhound with *pannus* would be used at stud. Unfortunately, because of its later onset, there are some litters bred from affected animals who may not have had any eye lesions at the time of breeding. This means that the disease continues to be present within the gene pool. There have been times in the past where highly popular sires have gone on to develop *pannus*, so the genes for the disease have been widely spread, with breeders concentrating on speed and chase ability.

What should I do if I suspect my greyhound may be affected by *Pannus*?

The first thing to do is to consult your regular veterinarian. They will be able to do an eye examination, and discuss the disease with you. They can also refer you to a veterinary ophthalmologist (eye specialist for dogs) who can give more specific advice and recommend treatments for more severe cases. Getting to the disease early gives the best chance of treatment, so don't hesitate – take the greyhound to the vet for a check up!