Anal furunculosis

What is anal furunculosis?
Anal furunculosis is a chronic, progressive inflammatory disease of dogs that results in ulceration and inflammation in the area surrounding the anus.

What animals are affected?
Anal furunculosis occurs most commonly in middle aged or old aged German shepherd dogs, although other breeds can be affected.

What are the clinical signs?
- Pain, particularly whilst passing faeces
- Foul odour associated with the perineum (the area between the anus and the genitals)
- Matting of fur of the perineum with discharge
- Red and sore-looking skin in the area of the anal ring
- Ulceration, potentially becoming extensive
- Draining sinuses in the perineum
**Why does anal furunculosis occur?**

There are a number of theories that have been proposed over the years regarding the cause(s) of anal furunculosis. These include the presence of a wide-based tail and increased numbers of sweat glands in the region of the anal canal.

However, recent research has found a number of similarities between anal furunculosis in dogs and a condition called Crohn’s disease in humans. Analysis has suggested that anal furunculosis lesions develop due to a lack of some of the immune system’s defences that would usually protect the intestines and perineal skin from the bacteria normally present in that area. A separate part of the immune system is then exposed to more bacteria than normal and becomes over-activated. This over-activation of certain components of the immune system leads to marked inflammation and ulceration of the local area.

**How is anal furunculosis diagnosed?**

Anal furunculosis is usually diagnosed by clinical examination. Examination may require sedation or general anaesthesia as it can be a little uncomfortable. This also allows thorough clipping of the hair surrounding the lesions, as well as cleaning of the area and documentation of the extent and distribution of the lesions. This initial assessment is invaluable in allowing monitoring of progress during subsequent treatment.

**What are the treatment options for anal furunculosis?**

The first line treatment for this disease involves drug therapy. In the majority of cases this will dramatically shrink the lesions and may clear them up completely. If the lesions shrink but remain present, the option of surgery to try to remove the remaining ulcerated areas may be discussed. A proportion of those patients whose lesions resolve following medical management or surgery can suffer recurrence (see ‘prognosis’ section below).

**Drug therapy** stabilisation of the condition can involve:
- Cyclosporine A (e.g. Atopica; Novartis) – this drug reduces the activity of the immune system cells, particularly those involved in aggravating the condition
- Cyclosporine A combined with ketoconazole. The combination of the two drugs together can reduce the dose of cyclosporine required. Not all patients tolerate this combination of drugs
- Azathioprine with prednisolone (a steroid) – these drugs also suppress the abnormal exaggerated immune response but are a little less specific in their action than the cyclosporine-based drug protocols
- Other drug protocols which reduce immune system activity can also be effective

**Monitoring:**

Once medical therapy has started, regular checks will be necessary to assess the tolerance of a patient to the medication, and also to chart the progress of the disease. This is likely to involve:
- Regular visits to the vet
- Examination of the perineal skin – this may require sedation or general anaesthesia, although but often dogs undergoing treatment are often much more comfortable than when they were first presented
- Blood samples – some of the drug protocols will require blood cell levels as well as liver and kidney function to be monitored periodically

Drug therapy can last from 4 to 24 weeks, but most patients respond within 12 weeks. Therapy can then be discontinued and re-commenced in the future should the problem recur.

**Surgery:**

Some cases are not controlled satisfactorily with medication. In such cases surgery is usually considered to remove the remaining lesions once they have been shrunk as much as possible with drug therapy. The surgery generally involves removal of the active lesions and some of the scar tissue as well as the anal glands from one or both sides. Sometimes it is necessary to stage the procedure, by performing surgery on the second side once the first has had time to heal. Surgical removal of persistent lesions can offer the chance of cure to those cases that have not been controlled by medical therapy.

**What is the prognosis for this disease?**

**Medical treatment:**
- At least 95% of cases will significantly improve following medical therapy, with lesions reducing in size between 60 and 100%
- Up to 85% of patients go into complete remission (lesions disappear) using medical therapy
- Approximately 40% of cases that achieve remission can suffer recurrence of the disease. If recurrence occurs it usually does so within 6 to 8 months after treatment is stopped
- Those cases suffering from recurrence often respond to additional courses of medical therapy
- Approximately 4% of cases do not significantly improve on medical therapy

**Surgical treatment:**
- Surgery is generally reserved for those cases that continue to suffer from lesions despite medical therapy or those with frequent recurrences

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• Surgery is performed once the lesions are small enough to avoid the need for reconstructive skin closure techniques (plastic surgery)

• The success rates after surgery vary, but recent work suggests that in appropriately managed cases, 90% of dogs are cured. To achieve these success rates requires careful patient management and this will usually involve a period of lesion reduction using medication prior to surgery.

What are the side effects/risks associated with treatment?

Medical treatment:
When they occur, most side effects are relatively minor and usually temporary. The side effects can include:

• Mild weight loss
• Increased moulting
• Gastrointestinal upset (vomiting /diarrhoea) – this is usually transient
• Bone pain that can result in a temporary low grade lameness
• Liver toxicity (this will be monitored during the treatment with blood tests if required)
• Renal toxicity (this will be monitored during the treatment with blood tests if required)

Surgical treatment:
Careful case management, selection of cases suitable for surgery and excellent surgical technique enable the surgeons at Willows to minimise the risk of complications to 10% or less. Unfortunately the risks of surgery can never be completely removed, and these include:

• Infection (this is not an inherently clean area on which to operate)
• Wound complications – a small number of cases experience wound healing complications
• Recurrence i.e. the problem comes back
• Faecal incontinence – i.e. the dog cannot control when or where he or she goes to the toilet – in the majority of cases where this occurs, it is a temporary setback
• Stricture (scar tissue narrowing) of the anal ring which can affect the affected individual’s ability to pass faeces. If you have any queries or concerns, please do not hesitate to contact us.