Perianal Fistula in Dogs - A Major Pain in the Butt!

Derriere discussions can’t really be classified as typical dinner discussion. Tush talk isn’t exactly refined dialogue. Nevertheless, the bottoms of our canine companions can develop medical and surgical issues. We can’t be scared to broach the topic. So, this week that’s exactly what I’m doing. One of the more painful posterior problems is called perianal fistula, and I’ve dedicated time this week to sharing important information about this condition. Happy reading!

Perianal Fistula - What are they?

Perianal fistula are tunnel-like lesions in the tissue around the anus. These tracts develop between deeper structures and the skin in this region, and do not necessarily affect the anal glands. Lesions are often smelly, ulcerated, and particularly painful. Veterinarians don’t truly understand why some dogs develop
perianal fistula. A popular theory is abnormal tail conformation and carriage combined with an increased number of special glands (called apocrine sweat glands) causes poor ventilation of the perianal region. The reduced ventilation in association with moisture and bacteria in feces and anal gland secretions induces inflammation. To date, this theory hasn’t been proven to be true. Currently, perianal fistula are postulated to be due to an abnormal response by the immune system. Specifically, a T cell-mediated inflammatory response is suspected based on documentation of selected messenger ribonucleic acid (mRNA) in perianal lesions and response to certain immunomodulatory drugs like cyclosporine.

**Perianal Fistula - What do they look like?**

Any dog can develop this condition, but German shepherds are most commonly affected. Indeed, veterinary studies have shown up to 84% of affected dogs are of German shepherds! The disease typically manifests – on average – at approximately five years of age. Male intact dogs are affected more frequently than females. Other breeds that are over-represented are:

- Border collies
- Collies
- Old English bulldogs
- Bouvier des Flandres
- Spaniels
- Labrador retrievers
- Old English sheepdog
- Irish setters

Common clinical signs include:

- Discomfort with lifting of the tail
- Diarrhea
- Painful defecation
- Straining to defecate
- Mucus in feces
- Constipation
- Fresh blood in feces
- Scooting
- Lethargy
Perianal Fistula - How are they diagnosed?

The diagnosis of perianal fistula is straightforward, and is based on a combination of compatible clinical signs, patient history, physical examination findings, and elimination of other disease processes from consideration. Other health conditions that may cause similar clinical signs include anal cancer, anal gland problems, benign rectoanal growths, and a condition called hyperplastic anus.

Veterinarians must perform a complete physical examination, including a digital rectal examination. Some dogs may require sedation due to their intense discomfort. The tunnel-like lesions may be superficial and isolated to one area or they may be severely ulcerated and multifocal. A stricture within the rectum may be present in patients with chronic disease. Biopsy of the perianal tissue may be recommended to rule out a cancerous process. Colonoscopy should be performed in patients with concurrent large bowel diarrhea (called colitis), as studies have shown up to 50% of dogs with perianal fistula have concurrent inflammation in their colons.
Perianal fistula in a dog. Note the ulcerated tissue around the anus, as well as the broad-based tail.
**Perianal Fistula - How are they treated?**

The current standard of care for treating perianal fistula is therapy with drugs that change how the immune system responds to inflammation. I like to think of treatment occurring in two phases. The goal of the Phase I is to gain control of a patient’s clinical signs. The objective of Phase II is to keep the signs at bay. After all, perianal fistula require lifelong therapy.

Potent immunomodulatory drugs are used to get a patient’s clinical signs under control in phase one. Many veterinarians will initially prescribe both topical and/or systemic medications to treat perianal fistula. Two of the most common medications – tacrolimus and cyclosporine – belong to a class of drugs called calcineurin inhibitors. Tacrolimus is a topical ointment applied as thin layer to the affected perianal tissues once to twice daily. The concentration of tacrolimus recommended for perianal fistula is 0.1%, and pet parents should wear gloves when applying this medication. When used alone, this drug has been documented to induce complete resolution in 50% of patients in four months.
Cyclosporine is an oral medication, and this drug has been shown to induce marked improvement or remission in 85% of patients within four months. Once clinical signs are adequately controlled, the dosing frequency of tacrolimus and/or the dose of cyclosporine is tapered over several months as part of Phase II. As mentioned earlier, lifelong treatment is typically needed, as up to 50% of patients with have recurrent perianal fistula if therapy is discontinued.
In addition to immunomodulatory therapies, patients often benefit from other interventions, including:

- **Antibiotic therapy** – Secondary bacterial infections of the perianal region are common initially during Phase I.
- **Pain medication** – Patients are quite painful until their clinical signs are under control.
- **Dietary modification** – Some patients, especially those with concurrent colitis, can benefit from dietary changes. Indeed, some perianal fistula resolve completely with a hydrolyzed, novel protein, or low residue formulas.
- **Stellar perianal hygiene** – Keeping the perianal region clean is of paramount importance for patient comfort and to reduce the risk of secondary bacterial infection.

Surgery used to be recommended as the initial management for perianal fistulae. Now, surgical intervention is recommended only for those patients who fail to respond to medical management. The goal of surgery is to remove diseased tissue, and surgeries include:

- **Surgical excision of fistula +/- anal glands**
- Deroofing and fulguration – Deroofing is a term used to describe removing the dead tunnel-like lesion to create a saucer-shaped wound, and fulguration is the process of using high-frequency electronic current to dehydrate tissue
- Tail amputation

Unfortunately, surgery is often ineffective, and complications are common. Others have employed the use of laser therapy and cryotherapy with variable success. Consultation with a board-certified veterinary surgeon is recommended if medical management is unsuccessful.

The take-away information about perianal fistula in dogs...

Perianal fistula are painful tunnel-like lesions around the anus of dogs, particularly German shepherds. Systemic and topical immunomodulatory medications are currently the treatments of choice. Lifelong intervention is typically needed. Supportive care, including nutritional support, pain control, and antibiotic therapy, is often initially helpful. When medical therapies fail to induce resolution, surgical interventions should be considered.

To find a board-certified veterinary internal medicine specialist, please visit the American College of Veterinary Internal Medicine.

To find a board-certified veterinary surgeon, please visit the American College of Veterinary Surgeons.

Wishing you wet-nosed kisses,

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