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SMALL ANIMAL CLINIC 530-752-1393
DERMATOLOGY SERVICE

Information for Clients

Interdigital Nodular Pododermatitis

Introduction

Also known as Pedal Folliculitis and Furunculosis, this often frustrating disease complex affects the feet and between the toes of dogs. There may be multiple causes of this multifaceted disorder. Infection, either bacterial or fungal is common but almost always secondary. Inciting factors can include trauma, contact irritation or parasites. Underlying disorders such as allergy or hypothyroidism may also play a part in interdigital nodular pododermatitis. Unfortunately, many cases are idiopathic in which no correctable underlying condition can be found. Initially, the lesions may resemble a foxtail (grass awn) or other foreign body, with a draining tract and swelling and redness. In the case of a single lesion, exploration and treatment for a possible foxtail is indicated. However, multiple lesions, especially on multiple feet make trauma due to a foxtail or other foreign body very unlikely.

Dogs of all ages and breeds may be affected, but heavy bodied, male dogs with short coats are overrepresented. Breeds such as the English bulldog, Mastiff, Great Dane, Boxer, German Shorthair Pointer, Beagle and Dachshund as well as the bull terrier breeds are more commonly affected. One or more feet may be affected, with the front feet (as the more weight bearing feet) often more involved. It is hypothesized in these breeds that friction between the toes may cause a foreign body-like reaction to the short bristly hairs of the feet. The hair follicle becomes inflamed, infected, and then ruptures allowing follicular material outside the hair follicle, which causes an inflammatory response and more infection. Excessive body weight will exacerbate this condition.

Clinical Signs

Affected tissue is usually red and swollen, often moist and can be odiferous. Lesions may look nodular with possible ulcers or draining tracts. The nodular lesions may be between the toes, between the footpads or appear on the toes near the claw-bed. The affected area can be varyingly painful or itchy. The pain may produce intermittent lameness. Secondary infection is extremely common, and may complicate the presentation. In severe cases, the infection and swelling may extend up the affected leg(s). Older lesions may open, drain, then scar leaving thickened, wrinkled tissue behind. Hair loss due to self trauma or inflammation is common.

Diagnosis

Diagnosis is based on history, physical examination and one or more laboratory tests. Skin scrapings and cytology smears are required to evaluate for parasites and infection. Blood tests to evaluate for underlying systemic disorders may be indicated. If a foreign body or injury is suspected, then radiographs are required. In some cases a skin biopsy may be helpful.

Treatment

Initially, secondary infections are treated with oral medications and the patient reevaluated to assess the level of improvement. Deep skin infections require long term therapy to resolve. Some patients experience significant improvement just by controlling the infections. If an underlying disorder has been identified, treating that condition will be beneficial. Unfortunately, nodular interdigital pododermatitis can also be a sterile process, with no underlying treatable cause or infection. In this situation, treatment of the inflammation with medications to modulate the immune response and suppress the inflammation may be helpful. Adjunct therapies may include foot soaks, topical lotions, sprays, or wipes. Once scarring has occurred, the feet will never appear normal, but can be kept comfortable with medications and possible lifestyle adjustments to avoid trauma or irritation to the feet. Weight control is very important. In some cases, lifetime medication and/or at home treatment is a reality. The vast majority of patients with this disorder can be kept comfortable and have a good quality of life.