

## **BRIARPOINTE VETERINARY CLINIC**

47330 Ten Mile Road  
Novi, MI 48374  
(248) 449-7447

Ronald A. Studer, D.V.M., L.P.C.    John S. Parker, D.V.M.

### **PODODERMATITIS**

#### ***What is pododermatitis?***

Pododermatitis is a term used to describe inflammation of the feet or paws.

#### ***What causes pododermatitis?***

Pododermatitis is an inflammation that can be caused by many disorders including infectious, allergic, or hormonal disorders, immune-mediated diseases, tumors or cancers and environmental contaminants.

#### ***What are the clinical signs of pododermatitis?***

The clinical signs vary with the cause.

Questions that may be asked in order to determine the cause or causes include the following:

- What is the general environment in which the dog walks and lives?
- Is there is seasonality to the clinical signs or do the symptoms last year-round?
- Are there additional lesions elsewhere on the body?
- What, if any, has the response to other treatments been?
- What is the dog's diet?
- Has the dog traveled anywhere outside its usual environment?
- Does the dog have any other medical problems? .



#### **Pododermatitis**

*From: Dermatology for the Small Animal Practitioner by  
Ralf Mueller  
Published by Teton NewMedia ©2000  
with permission*

Clinical signs associated with the various causes of pododermatitis are:

**Infectious** – The feet and paws are often red and swollen. There may be nodules or fungal lesions (kerions), ulcers or discharge from the lesions. There is often hair loss and the dog may lick the feet constantly.

**Allergic** – The feet are red and inflamed, and swelling is usually present. Itching is a constant problem with the tops of the paws most commonly involved. There is usually reddish brown staining of the fur from pigments naturally present in the saliva. In cases of contact pododermatitis (walking or contacting an offensive substance), the undersides of the paws are usually involved, although the entire paw may be affected.

**Immune-mediated** – The most common clinical signs are crusts (scabs) and ulcerations with occasional blisters. All four feet are commonly involved, especially the footpads and nailbeds. Excessive darkening of the tissues and thickened, crusty footpads with erosive lesions may be present, especially in cases of pemphigus foliaceus.

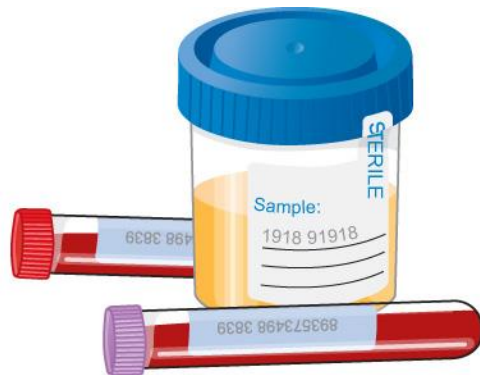
**Hormonal or metabolic** – Lesions are usually related to secondary skin infections and include pustules, redness and inflammation.

**Tumors** – Usually only one foot is involved and there may be a nodule, or one or more ulcers. Multiple feet may be involved in squamous cell carcinoma of the nailbed.

**Environmental** – One or more feet may be involved, depending on the cause or contact status. Most dogs experience chronic interdigital inflammation, ulceration, abscesses and discharge with or without itching.

### ***How is the specific cause of pododermatitis diagnosed?***

Diagnosis is based on medical history and clinical signs. Additional tests such as bacterial culture and antibiotic sensitivity tests, fungal cultures, skin scrapings, biopsies, blood and urine tests, hypoallergenic food trials and radiographs will be performed based on your pet's specific needs. Some of the specific causes of pododermatitis include:



- **Infectious**

Bacterial – Staphylococcus, Pseudomonas, Proteus, Mycobacterium, Nocardia and Actinomyces

Fungal – Dermatophytes (ringworm), sporotrichosis, mycetoma, blastomycosis, and cryptococcosis

Parasitic – *Demodex canis* (mange mite), *Pelodera strongyloides* (soil nematode) and hookworms

- **Allergic**

Atopy or seasonal allergies, food hypersensitivity, allergic contact dermatitis

- **Immune-mediated**

Pemphigus foliaceus, systemic lupus erythematosus, erythema multiforme, toxic epidermal necrolysis, vasculitis, cold agglutinin disease, pemphigus vulgaris and bullous pemphigoid

- **Hormonal or Metabolic**

Hypothyroidism, hyperadrenocorticism (Cushing's disease), hepatocutaneous syndrome (necrolytic migratory erythema – rare)

- **Tumors**

Fine needle aspirate, cytology used to diagnose

Foot tumors are more common in cats than dogs, and usually cancerous.

Squamous cell carcinoma, melanoma, mast cell tumor, keratoacanthoma, inverted papilloma, eccrine adenocarcinoma

- **Environmental**

Irritant contact dermatitis, trauma, concrete and gravel dog runs, excessive exercise or running on hard surfaces, clipper burn, grass awns, foreign bodies, thallium toxicity

### ***How is pododermatitis treated?***

As you can see, there are numerous potential causes for your dog's condition. Once a specific diagnosis is made, treatment will be directed toward that cause. If the pododermatitis has an allergic or immune-mediated cause, it is important to note that the condition will not be cured. In these cases, the therapeutic goal is to minimize clinical signs and recurrences.

### ***What is the prognosis for pododermatitis?***

The prognosis is dependent on the diagnosis. Most dogs respond well to therapy. With simple lifestyle adjustments, they go on to enjoy relatively normal lives.

---

*Edited by John S. Parker, DVM November, 2007*

*© Copyright 2005 Lifelearn Inc. Used with permission under license. April 4, 2017*