

# Interdigital Cysts

(Interdigital Furunculosis or Interdigital Pyogranuloma)

## BASIC INFORMATION

### Description

Small to medium-size lumps that appear between the toes of dogs on the webbing of the feet. These occur as single or often, multiple nodules. The masses are painful and may cause lameness. They also can open and ooze blood or other material.

While they have been called interdigital cysts for a long time, they are not a cyst at all, rather nodules of deep inflammation which *may or may not* include infection. The word pyogranuloma literally translates to thick inflammation with pus. Furunculosis is a term that denotes about the same thing.

### Causes

The cause of the disease is poorly understood. Certain breeds including Labrador Retrievers, Bulldogs and the Shar Pei are commonly affected but the issue can occur in any breed. It is thought that short bristly hairs in the webbing of the feet become ingrown, possibly due to trauma (due to walking!) and the body creates a foreign body reaction to the ingrown hairs. The texture of the interdigital webbing may also play a role in the disease.

Atopic dermatitis (allergies) and demodectic mange can trigger a similar reaction and *may* influence formation of these nodules. Inflammation alone can create the lumps but allergic inflammation or secondary infection by bacteria and/or yeasts can compound the problem.

### Clinical Signs

Any small lump in the webbing between the toes can potentially be an interdigital pyogranuloma. They may appear smooth, can become red and discolored, and may rupture and drain a bloody material. Dogs may lick and bite at their feet as these do cause pain and lameness in many dogs. Some can grow/spread into other parts of the feet. As time passes the lesions may become hard and change in appearance.

Pyogranulomas may mimic foreign bodies such as grass awn or splinters, but these are usually single lesions, usually occur on front feet only, and are more variable in their location.



## **Diagnostic Tests**

Your veterinarian can usually diagnose the disease upon physical exam. If your dog is of a susceptible breed, that will influence the diagnosis. If he/she suspects a foreign object under the skin, the lesion may be explored. Otherwise, your vet may use cytology to determine if there is secondary infection, cultures to determine what bacteria are growing in the lesions and what antibiotics may be best to use, or even biopsy to make an exact diagnosis and determine that the lesion is not malignant.

## **TREATMENT AND FOLLOW-UP**

### **Treatment Options**

**THIS CAN BE A VERY FRUSTRATING DISEASE TO TREAT!**

#### **Options include:**

1. Topical antibiotics
2. Topical shampoo
3. Topical mupirocin
4. Oral antibiotics and possibly oral steroids
5. Soaking of paws
6. Surgical removal of the lump(s)

### **Follow-up Care**

Most dogs will have long term issues and unfortunately may need repeated treatments. It is best to think of managing this condition: cure is unlikely.

### **Prognosis**

Fair, most pets need lifetime, repeat care. Some lesions may take time to resolve.

