



## **DEMODEX MANGE or DEMODECOSIS**

### **What is Demodex?**

Canine demodecosis is an inflammatory parasitic disease of dogs characterized by the presence of a high number of mites in the hair follicles which often leads to secondary bacterial infection. The mite, *Demodex canis*, is part of the normal fauna of canine skin and is normally present in small numbers. The mite resides in the hair follicles and oil glands of the skin. Pathologic changes develop from mite infestation when numbers exceed that tolerated by the immune system. The initial proliferation of mites may be due to a genetic or immunologic disorder.

### **What are the Signs of Demodex?**

#### **Localized Demodecosis:**

Most cases occur in young dogs with a median age of 3-6 months. There are no recognized breed or sex predilections.

Clinical lesions are usually mild and consist of redness and a light dandruff. One to several patches may be present, and the most common site is the face, especially around the mouth and eyes. Patches may also be seen on the body and legs. Most cases heal spontaneously with less than 10% progressing to generalized demodecosis.

#### **Generalized Demodecosis:**

The generalized form of the disease can occur in both the young and old. Adult onset demodecosis is often a severe canine skin disease that responds poorly to treatment.

The disease can be widespread from the onset with multiple, poorly circumscribed patches of redness, hair loss, and dandruff. As hair follicles become distended with large numbers of mites, secondary bacterial infections are common, often with rupturing of the follicle. As the condition progresses, the skin can become severely inflamed, with pus and swelling present. The sudden occurrence of adult onset demodecosis is

often associated with internal disease, cancers, or immunosuppressive disease.

### **How is it Diagnosed?**

Skin scrapings are diagnostic—large numbers of mites will be seen in the majority of cases.

Occasionally getting a diagnosis may necessitate a skin biopsy.

### **How is it Treated?**

**Localized Demodecosis:** Treatment of the localized form of the disease can be conservative. Most cases (90%) resolve spontaneously with no treatment or simple topical medicine.

**Generalized Demodecosis:** Demodecosis in the adult dog is often a management problem for the owner. Expense and frustration with the chronicity of the disease are at issue. Many of these patients are medically controlled rather than cured. The prognosis for canine demodecosis depends heavily on genetic, immunologic, and underlying diseases.

The general health status of dogs with the localized or the generalized form of the disease should be evaluated. The treatment consists of:

1. Apply a benzoyl peroxide shampoo prior to the application of the dip as a bactericidal therapy and to increase exposure of the mites to the miticide through its follicular opening activity. Protect your pet's eyes prior to bathing with a drop or two of mineral oil (available at any drug store).
2. Amitraz (Mitaban-Upjohn) is the most commonly used treatment. It is used weekly (the label reads every other week) and **MUST BE** diluted 1/2 vial (5.3mls) per gallon of water (or 1.3ml [or cc] per quart of water) until the resolution of clinical signs and no mites are found on skin scrapings (do not rinse off the dip, let the dog air dry). Cover every square inch of skin with the dip solution.

Studies show that 11-30% of patients will not be cured with Amitraz, so we may need to choose an alternate therapy if no response is seen or control the case with maintenance amitraz dips every 2-8



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Bryan Neidigh, DVM  
Cheryl Rahal, DVM ACVIM  
Jason Gold, DVM

## **DEMODEX MANGE or DEMODECOSIS (Cont.)**

weeks. *If you have any questions about its usage, please call us.*

The most common side effects of amitraz including sleepiness, inactivity, depression, and loss of appetite are seen in 30% of patients for 12-36 hours post treatment. The incidence and severity of the side effects do not appear to be proportional to the dosage or frequency of use. Humans can develop dermatitis, headaches, and respiratory difficulty after exposure to amitraz, so use it in a well ventilated area and wear rubber gloves. Allow your dog to air dry outside.

### **FOLLOW-UP**

Periodic examination of multiple skin scrapings and evidence of clinical resolution are used to monitor progress.

Special instructions: \_\_\_\_\_

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*Thank you for this opportunity to serve you!*