

UNIVERSITY OF CALIFORNIA, DAVIS VETERINARY MEDICAL TEACHING HOSPITAL SCHOOL OF VETERINARY MEDICINE DAVIS, CA 95616

> SMALL ANIMAL CLINIC 530-752-1393 DERMATOLOGY SERVICE

Information for Clients

Canine Demodicosis

Introduction

Canine Demodicosis (also known as Demodectic Mange or Red Mange), is a fairly common skin disease caused by the mite, *Demodex canis*. This mite lives deep within the hair follicle and is a normal inhabitant of dog skin. Demodex is species specific and is <u>not</u> contagious to other animals or humans. Other mammalian species (including humans!) have their own Demodex mites, and like the dog mite they are not contagious and can be found in normal skin. However, in certain dogs, problems in the immune system induce an increase in the number of mites such that they can cause skin disease.

Currently we do not know all the reasons that "trigger" the overpopulation of mites. In newborn puppies transmission is thought to occur from the bitch to the nursing puppies. In most pups the immune system keeps the mite population under control. Occasional young dogs and puppies will break with Demodicosis in a few spots which will spontaneously "disappear" as the dog's immune system matures and drives the mite numbers down again. In older dogs we believe there is something wrong with the immune system whereby the body stops surveillance of the normal numbers of mites. Therefore, the mites are allowed to reproduce in greater numbers and cause skin disease. Often, an underlying disease process or a history of certain types of drugs may be responsible for suppressing the immune system and inducing Demodicosis. Occasionally, no underlying reason can be found and the disease is assumed to be "idiopathic" or self-caused by an incompetent immune system. Finally, there is a strong tendency for certain breeds to acquire Demodicosis. Rottweilers, Pit bull terriers, English bulldogs and the Chinese Shar Pei are at the top of the list. Because of this, spaying or neutering a pet with Demodicosis is highly recommended.

Clinical Signs

There are two forms of canine Demodicosis: Localized and Generalized. Localized Demodicosis involves fewer than 5 lesions over the body. Often this form resolves on its own or with local therapy. This is the form most often seen in puppies. Generalized Demodicosis involves 5 or more lesions or may involve 1 or 2 large areas of infection (i.e. over the face and muzzle area or involving 2 or more feet). Generalized Demodicosis can be a severe chronic disease. Unless a correctable underlying cause can be found, lifelong treatment is sometimes necessary. Secondary bacterial skin infection (pyoderma) is often present which complicates the disease.



Diagnosis and Treatment

Diagnosis of canine Demodicosis is made either with a deep skin scraping or skin biopsy performed by a Veterinarian. The mites are tiny and can only be observed under the microscope. The number of mites and the life stages observed (adults, juvenile forms and/or eggs) will help determine the treatment recommendations. Treatment varies with the severity of the disease. The dogs overall physical condition, age and breed will also be considerations in the determination of type of treatment. Treatment must continue until 2 months past clinical resolution (2 negative skin scrapings). Stress can exacerbate this and other disease process'. Ideally, unnecessary stress (participation in dog shows, the addition of a new pet, major changes in the daily routine) should be avoided during this time. Once the Demodicosis is under control, have your unaltered pet spayed as the estrus cycle can cause a breakout.

Treatment Recommendations		
SHAMPOO:		
DIP:		
ANTIBIOTIC:		
OTHER:		