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Demodicosis

Demodicosis (demodectic mange) is a disease caused by an imbalance of your pet's immune system and the normal skin inhabitants, *Demodex* mites. The disease varies from a self-limiting, local problem in puppies to a progressive, generalized skin disease in older dogs and cats.

THE *DEMODEX* MITE

All puppies and kittens acquire *Demodex* mites while nursing. A limited number of mites live harmlessly in the hair follicles, kept in check by your pet's immune system. The mites die rapidly when not protected in the hair follicles, and are no threat to you or other pets.

DIAGNOSES

Diagnosis of demodicosis is based on the appearance of the skin lesions and skin scrapings. Skin scraping involves the removal of material from the hair follicles and surface of the skin. The scraping is examined microscopically to determine the number of adult and immature mites present. Skin scrapings are also used to monitor your pet's response to treatment.

In some dog breeds (Shar peis) and locations (the feet), skin scrapings may not reveal the mites and surgical biopsies are required for diagnosis.

LOCALIZED DEMODICOSIS IN PUPPIES

Parasitism, illness, poor nutrition and immaturity may depress the immune system. This decrease in resistance allows the mites to proliferate and damage the hair follicles. The ruptured follicles result in scaly, hairless patches, usually on the face and front legs.

Localized demodicosis is a mild disease that responds to treatment over 4 to 8 weeks. For puppies with only a few spots, a special ointment to be applies once daily to the lesions will be prescribed. Initially, the areas may appear to enlarge since applications of the medication will remove some of the dead hair. The effectiveness of treatment is monitored with periodic reexamination and skin scrapings.

For puppies with many affected areas or if the lesions begin to spread, treatment similar to that described in the next section will be pursued.

Since the disease worsens with stress, elective procedures such as spaying and neutering may be delayed until the demodicosis in resolved.

GENERALIZED DEMODICOSIS IN YOUNG DOGS

Occasionally, localized demodicosis will progress to a severe generalized disease involving large areas of skin. In dogs under two years of age, this disease is usually caused by an inherited defect of the immune system.

Resolution of generalized demodicosis often requires several weekly, medicated baths and dips. An injectable or oral anti-parasite medication may also be used. Progress is monitored with periodic examinations and skin scrapings.

If the demodicosis is complicated by skin infection, antibiotics will be prescribed. Sometimes cultures of the skin are needed to determine the type of bacteria present and appropriate antibiotics.

Treatment of generalized demodicosis in younger dogs is sometimes frustrating and relapses may occur.

Since this form of the disease is inherited, your pet should not be used for breeding.

GENERALIZED DEMODICOSIS IN OLDER DOGS

In dogs older than two, generalized demodicosis is usually associated with immune suppression from chemotherapy or long-term steroid use, or secondary to an underlying problem such as infection, metabolic disease (like diabetes or Cushing's disease), or cancer. Investigation for underlying disease, through blood tests, radiography, urinalysis and possibly ultrasonography is recommended.

Treatment of generalized demodicosis in older dogs involves resolution of the underlying disease if possible, frequent dips, and antibiotics. A daily oral anti-parasite medication has been shown to be effective in some cases of generalized demodicosis. Periodic examinations and skin scrapings are done to monitor the disease progress.

Treatment of demodicosis in the older dog may be unsuccessful, especially of an underlying disease is present.

PODODEMODICOSIS

Pododemodicosis is a form of the disease that involves the feet. This disorder may occur without any other skin involvement or may be a residual problem after treatment of generalized demodicosis. Diagnosis may require skin biopsies, and treatment can be frustrating.

DEMODICOSIS IN CATS

Demodicosis is uncommon in cats. The disease is often secondary to immunesuppressive disorders such as infection with Feline Leukemia Virus (FeLV) OR feline Immunodeficiency Virus (FIV). Feline demodicosis may also occur secondary to other infections, and immune-mediated or metabolic diseases.

Treatment and outcome is similar to the generalized form in older dogs.

SPECIAL HOME CARE INSTRUCTIONS FOR YOUR PET