



### ABOUT THE DISEASE

**Demodectic mange** or **demodicosis** is a skin condition most often associated with canine patients caused by the microscopic parasitic mite, *Demodex canis*.

In rare circumstances other species may have **demodectic mange** but this is caused by a type of *Demodex* specific to the animal's species. *Demodex canis* is not infectious to other species nor transmissible to humans.

*Demodex* mites can be present in low numbers on the skin of healthy patients and are found deep within the hair follicles. However, if the patient's immune system is underdeveloped or weakened, the mites can reproduce in high numbers and cause lesions.

This condition, **demodectic mange**, is most often seen in young canine patients, who do not yet have full maturation of their immune system. However, certain adult conditions can cause a weak immune system including poor nutrition, systemic disease (organ failure, cancer, etc.), or drug suppression (chemotherapy, glucocorticoids).

Two forms of **demodicosis** exist:

- Localized - affects one small patch of skin causing hair loss, redness of the skin, and blackheads (comedones)
- Generalized - affects more than one area of skin at the same time

### OBTAINING A DIAGNOSIS

**Demodicosis** is often diagnosed by microscopic examination of debris obtained by performing a deep skin scraping.

If a skin scraping does not show mites, but the disease is still suspected, small skin biopsies may aid diagnosis.

As **demodicosis** usually occurs with a weakened immune system, additional testing (blood work, urine testing, radiographs, ultrasound, etc.) should be considered to find an underlying disease.

### TREATMENT

In some young canine patients, they may self-correct mild cases of **demodicosis** as their immune system matures. Approximately half the cases of generalized **demodicosis** will resolve without treatment. However, most cases are treated to ensure quick and complete recovery.

The only FDA-approved topical treatment in the USA for canine **demodicosis** is a weekly/biweekly antiparasitic solution which contains Amitraz. With the exception of collie-like herding breeds, some patients may be treated with oral Ivermectin, which is often a long course of treatment.

From the beginning of treatment there is a few-week delay until visible improvement occurs. In fact, hair loss may continue for a short period of time as the cycle concludes.

Antibiotics are administered in cases of generalized **demodicosis** and in cases of localized **demodicosis** that have a secondary bacterial infection.

Treatment is concluded when no additional parasites can be found on three consecutive microscopic deep skin scrapings approximately 2-4 weeks apart.

### TIPS FOR SUCCESS

- Do not wet animals between medicated dips (bathing, swimming, etc.).
- Do not miss follow-up skin scrapings, even if signs appear to be improving.
- Do not use **mange** medications that are not specifically prescribed for **demodicosis** by a veterinarian.
  - Over-the-counter products are ineffective and may be toxic.