



Demodicosis

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Ectoparasitic infestation is the single most important cause of canine skin disease. Demodicosis is a disease of dogs caused by cigar shaped parasite *Demodex canis*. This mite, a normal inhabitant of canine skin, is found in larger than normal numbers in diseased dogs. It is an obligatory parasite inhabiting the hair follicles and occasionally the sebaceous glands.

There are four stages in the life cycle, viz. eggs, six legged larvae, eight legged nymphs and eight legged adults. These mites are transferred from bitch to nursing neonates.

Localised Demodicosis

Typically develops on the head and forelegs and less commonly on the trunk as one or more patches of alopecia. There may be mild erythema and scaling and later hyperpigmentation develops. The majority of cases occur in pups 3 to 6 months old and spontaneous recovery without treatment is usual up to 10% of cases progressing to the generalized form of the disease

Generalised Demodicosis

It is a severe skin condition frequently

associated with generalized deep pyoderma, which may be fatal with out extensive treatment, such cases have been shown to have profound T cell suppression. This T cell suppression has been suggested to be induced by a humoral substance produced by the mites.

Lesions of generalized demodicosis are most marked on the head and legs but quickly spread to other areas. There is severe crusting, scaling and alopecia. When pyoderma is a complication, pus may be expressed from the skin. In acute cases there may be extensive erythema hence the old term "Red mange" As the lesions became chronic this erythema is replaced by stale blue hyperpigmentation.

Juvenile on set demodicosis is the term used to describe case beginning before the age group of two years, while adult on set demodicosis occur at any age after two years. Juvenile onset demodicosis is more common and has a more favourable prognosis and the adult on set form may be associated with serious underlying systemic, possibly immunosuppressive diseases.

In demodectic pododermatitis, the lesions may be confined to feet. There may be swelling erythema and purulent infection of the feet in acute cases, and thickened hyper pigmentation of skin with alopecia in chronic cases.

Diagnosis

Diagnosis in all cases is made by the examination of skin. Affected skin should be squeezed and then deep scrapings are performed. These may be examined in mineral oil or in 5% potassium hydroxide. Typically large numbers of mites and eggs can be seen.

Treatment

Most cases of localised demodicosis regress spontaneously. About 10% of these cases develop the generalized form. General advice is given regarding feeding and management of the dog. Shampooing with 2.5% benzoyl peroxide is helpful due to the follicular flushing effect of this product.

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