

Canine Familial Dermatomyositis

Canine familial dermatomyositis is a hereditary inflammatory disease of skin and muscle. Typical characteristic features are symmetrical scarring hair loss of the face and limbs and atrophy of the muscles of mastication. The cause of the disease is unknown but an immunological defect has been suggested.

Certain dog breeds are predisposed due to a hereditary component. Commonly affected breeds include Collies, Shetland Sheepdogs, Welsh Corgis, Chow Chows, German Shepherd Dogs, and the Kuvasz.

The disease generally affects dogs before they are 6 months of age, however, the condition can also occur in adults. Lesions are typically found on the face including the bridge of the nose, around the eyes, on the ear tips, limbs, feet, and tail. Lesions consist of a scarring hair loss, scaling, redness, and crusting. Skin ulcers, vesicles, papules, and pustules may also develop. As the disease often waxes and wanes, the severity of lesions is quite variable.

Muscle atrophy correlates with disease severity and appears after skin lesions develop. The muscle atrophy is usually minimal and is limited to the muscles of mastication. However, if muscle atrophy is severe, affected dogs have difficulty in eating, drinking, and swallowing. Severely affected animals may also suffer from growth retardation, megaesophagus, lameness, infertility, and general muscle atrophy.



Dermatomyositis is a difficult disease to diagnose. In addition to history and clinical findings, skin biopsies and electromyography can be performed to try and confirm the diagnosis.

Minimal lesions often resolve spontaneously so treatment may not be necessary. For those cases requiring treatment, the drug of choice is Pentoxifylline as this improves circulation and decreases the release of inflammatory components in the body. There is a lag period of 2-3 months before clinical benefits are observed. The use of steroids such as prednisolone can be given for occasional flare-ups. The combination of tetracycline and niacinamide has also been used for control. Additionally, oral vitamin E or marine lipid supplements may aid in skin lesion repair.

Key Point: Dermatomyositis is a hereditary disease and affected dogs should not be used for breeding.