



DEGENERATIVE MYELOPATHY

What is Degenerative Myelopathy?

Degenerative Myelopathy (DM) is a genetic abnormality which affects the central nervous system. DM refers to early onset degeneration and subsequent loss of nerve cells in the spinal cord. The degeneration starts at the tail end of the spinal cord and progresses up towards the front legs. The first signs might be very subtle and just appear as weakness in one of the hind limbs. This will progress to scuffing, knuckling, uncoordinated gait and weakness in both hind limbs. Therefore, you may see that your dog is dragging their paws, crossing their paws over when walking and falling over when turning a corner. The disease commonly affects medium to large-breed dogs over 5 years of age.

Why is my dog affected?

DM is due to a genetic mutation (SOD1 or SOD2). The mutation is due to a recessive gene. Your dog's parents might have the gene but not present clinical signs.

The disease is more commonly seen in dogs over 5 years of age and medium to large breeds. Breeds more commonly affected are the German Shepherd, Siberian Husky, Miniature and Standard Poodle, Boxer, Pembroke and Cardigan Welsh Corgis, Chesapeake Bay Retriever, Rhodesian Ridgeback, Bernese Mountain Dog, Kerry Blue Terrier, Golden Retriever, Wire-haired Fox Terrier, American Eskimo dog, Soft-coated Wheaten Terrier and Pug.

How is DM diagnosed?

Diagnosis is based upon the dog's description, clinical features and exclusion of other spinal cord disorders (such as intervertebral disc diseases for example). Further investigations, including spinal cord imaging (MRI) is typically normal and this is often required to rule out other diseases that could be treated.

A DNA test based on the mutations is available. The genetic test will be able to tell if a patient is a carrier (therefore less likely to be affected), at risk or extremely unlikely to be affected. It is important to be aware that this genetic test does not confirm DM. Definitive diagnosis is reached with spinal cord biopsies (not routinely performed due to risks of trauma to the spinal cord).

What are the treatments available and what is the prognosis for my dog?

Unfortunately, degenerative myelopathy is a progressive and irreversible disease. There are currently no treatments for DM. Physiotherapy and hydrotherapy are recommended in order to slow the progression of weakness and muscle loss, and to improve quality of life.

DM is not associated with pain or discomfort. The disease's progression is variable between individuals (usually reported to be over a 6 to 12 month period). The long-term prognosis is poor, and the aim is to keep your dog as comfortable as long as possible until the decision might be made to put your dog to sleep.