



# Degenerative myelopathy

## WHAT IT IS AND HOW TO MANAGE IT

**Q:** *I'm a long-time reader of your magazine, and I would like more information about degenerative myelopathy. Sadly, my cherished German shepherd suffers from it. What's your take on this awful disease?*

**A:** We are so sorry to hear that your dog is afflicted with this disease. Over the past several years, we have learned more about how to manage this condition, so we can share the following information with you and our readers.

Degenerative myelopathy (DM) is a disorder of the spinal cord that affects dogs and is similar to amyotrophic lateral sclerosis (ALS), a human disease that's also known as Lou Gehrig's disease.

The word "degenerative" in the name refers to the degeneration of the spinal cord

and the peripheral nerves. "Myelopathy" describes any neurological deficit of the spinal cord. The spinal cord contains fibers that relay movement commands from the brain to the limbs and sensory information from the limbs to the brain. DM is known now to be a genetic disorder: A genetic mutation has been identified that is a major risk factor for development of the disease.

### Who's at risk?

The onset of this disease occurs with no real predictability and usually affects adult dogs

**The good news is that intensive physical rehabilitation and selected assistive equipment (when properly fitted, of course) can extend a dog's survival time by up to three years, versus six months to a year for dogs who do not receive such therapy.**

— middle-aged and older. The typical age of onset is between 8 and 12 years of age, and both males and females are equally affected.

DM is common in several breeds, including German shepherds, Chesapeake Bay retrievers, Rhodesian ridgebacks, boxers, corgis and standard poodles. It can also occur in other breeds and in mixed-breed dogs.

**What are the symptoms?**

In general, DM is not a painful disease. However, having a weak hind end can put stress on other areas of a dog's body — such as the neck, shoulders and front limbs — and cause pain. DM typically comes on very gradually, so you may not see the very early onset. Initial signs include loss of coordination (otherwise called ataxia) in the hind limbs, swaying or wobbling when walking, rear feet knuckling over or dragging, and difficulty with walking up steps, squatting to defecate or getting into the car.

Signs of progression are weakness of the hind limbs, buckling in the knees and difficulty standing. The weakness progresses until the dog is unable to walk on his or her hind legs. Advanced signs of DM are inability to control urination and defecation, and weakness in the front limbs.

To make a diagnosis of DM, other potential causes need to be ruled out. This means

that your dog's veterinarian should look for other diseases that affect a dog's spinal cord, using diagnostic tests such as spinal X-rays, a CT scan, MRI or something called a myelogram.

You might be wondering if there's a DNA test for the disease. A DNA test exists, available through the Orthopedic Foundation for Animals, that can identify dogs who do not have the DM gene, as well as those who are carriers and those who are at much higher risk for developing DM. However, even dogs whose results show that they are at higher risk for developing DM may not develop the disease. In other words, the test does not actually diagnose DM.

**What's the cure?**

Unfortunately, there is no cure. The good news, though, is that intensive physical rehabilitation and selected assistive equipment (when properly fitted, of course) can extend a dog's survival time by up to three years, versus six months to a year for dogs who do not receive therapy. A study conducted in Europe confirmed this to be accurate when the researchers determined that dogs who received intensive physical rehabilitation survived longer than dogs who received moderate or no therapy.

A typical physical therapy program might involve walking, weight shifting, stretching, strengthening and balance exercises, and underwater treadmill exercise. The most important thing to remember when adding physical activity to your dog's care routine is that a fine balance exists between not doing enough and doing too much. Overdoing it can worsen the dog's disease and is more damaging than doing too little.

As mentioned, DM is generally not a painful disease, although dogs can have some pain related to muscle compensation and weight shifting. Ways to manage pain include massage, acupuncture, cold laser, chiropractic adjustments, nutraceuticals



(foods that provide health benefits) and prescription medications such as non-steroidal anti-inflammatory drugs (NSAIDs), if your veterinarian feels this is indicated.

As the disease progresses, you may also want to discuss mobility assistive devices with your veterinarian. These devices include booties to prevent skin damage from dragging of paws, slings or harnesses, and possibly carts with wheels.

We wish you the very best of luck as you enjoy the continued companionship of your dog through these often-trying times. Remember, too, that plenty of hugs administered frequently can go a long way as well. 🐾

**If you have a question you'd like our vets to tackle in an issue of *Best Friends* magazine, send an email to [editor@bestfriends.org](mailto:editor@bestfriends.org) and we'll consider it. Please type "Ask the Vet" in the subject line.**

**For timely medical advice, please consult your veterinarian as soon as possible.**