

SOUTHEAST VETERINARY NEUROLOGY

10 things all Dachshund owners should know about intervertebral disk disease (IVDD)

1. What is IVDD and what does it look like?

Intervertebral disk disease (IVDD) is caused by degeneration of the intervertebral disk leading to herniation into the vertebral canal and spinal cord compression. The vertebral column ("spine") is made up of individual bones, called vertebrae. In between each bone is an intervertebral disk, which acts as a 'cushion' between the bones. The disk can be thought of as a jelly donut, with an inner jelly-like part and an outer fibrous 'donut'. In certain breeds, such as the dachshund, the inner portion loses it's jelly-like consistency and shock-absorbing capacity and becomes more likely to bulge or herniate out of the fibrous donut portion. When this happens, the inner portion can compress the spinal cord causing pain, difficulty using the legs (dragging, standing on the top parts of the paw), or even paralysis (inability to move the legs).

2. IVDD is super common

In fact, it's the MOST COMMON spinal cord condition in dogs. One in 4 dachshunds will be affected by IVDD at some point in their life. That's a 25% chance of having IVDD! Not all dogs with IVDD will experience paralysis. Symptoms may range from pain, to wobbly walking, to inability to move or feel the legs.





3. What should I do if my pet exhibits symptoms of IVDD?

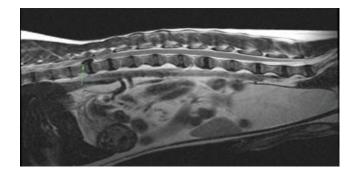
Early recognition and treatment is often critical to recovery. At the first signs of disk disease, be sure to confine your pet to a crate to avoid further injury. Call your veterinarian. They will likely either recommend pain medications and cage rest (see below) or evaluation by a board-certified neurologist. After a thorough evaluation, the neurologist can tell you WHERE the problem is, HOW SEVERE the problem is, and can discuss the list of POSSIBLE causes.

4. How is IVDD diagnosed?

While IVDD is the most common cause of spinal injury in dogs, there are other diseases that can look very similar. These include spinal tumors, strokes, meningitis, infections and others. An experienced neurologist will be able to tell what the most likely cause is and recommend the best course of action.

Radiographs (X-rays) alone cannot diagnose IVDD, although it is useful in looking for other causes such as bony tumors, broken bones or bone infections.

Magnetic Resonance Imaging (MRI) is the best way to diagnose IVDD. CT scans can sometimes diagnose IVDD but can miss many other causes. Myelography is an older test that is not recommended.



5. Is surgery always necessary?

Despite it's dramatic appearance (screaming in pain, dragging of the limbs or inability to walk), most cases of IVDD in dogs are completely fixable.

In general, dogs with IVDD may be treated in two ways: with medicine and cage rest or with surgery. While surgery may sound scary, for many dogs, it is the best option.

Let's talk about a non-surgical course first. Many dogs that are only exhibiting pain or walking wobbly can get better with strict rest and medications. If the disk herniation is small, medications can be used to decrease inflammation and control pain. These medications do not remove the herniated disk material. If a non-surgical route is chosen, it is important to strictly rest your dog. Moving around can cause further injury to your dog. A crate is ideal to limit your pet's activity, but a small bathroom, baby playpen or even a laundry basket can be used. Depending on the severity, many dogs can recover even without surgery. For dogs that are mildly affected (pain only or wobbly walking), there is about a 65% chance of recovery without surgery. For dogs that are unable to walk, but can still feel their back legs, the chance of success without surgery is about 55%. If the dog cannot feel the back legs, the chance of walking without surgery is less than 5%. This highlights the importance of an early and accurate assessment to determine the severity of signs.

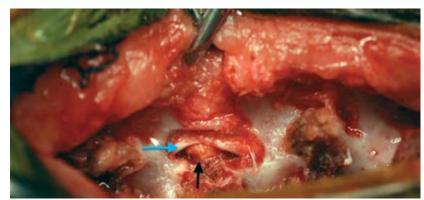
A non-surgical approach sometimes avoids the costs of surgery, however, there are several disadvantages. First, the likelihood of getting better is not as good as with surgery. It usually takes longer to recover than with surgery. Recovery is typically not as good as with surgery. The risk of signs returning is higher than with surgery. Finally, the likelihood of worsening is higher than with surgery. For this reason, in appropriate cases, surgery is recommended.

6. What does surgery entail?

The surgery route is the best option for any dog that is unable to walk and for any dog with pain or wobbly walking that does not respond to medications and rest. A hemilaminectomy is performed if the disk is in the back, and a ventral slot procedure is usually performed if the disk is in the neck. Pain medications are provided during and after the surgery. Most dogs are much more comfortable immediately after surgery. For dogs that are only painful or walking wobbly, the likelihood of success is greater than 95%. For dogs that are unable to walk, but can still feel their legs, the likelihood of regaining the ability to walk is 90-95%. For dogs that are unable to feel their back legs, the chance of walking with surgery is only about 50% if performed in the first 24 hours after losing the ability to feel the legs.

Most dogs stay in the hospital for a few days after surgery for pain medications and rest. After the pet goes home, there is a period of crate rest.





7. What about physical rehabilitation?

Physical rehabilitation is recommended for pets with IVDD. Physical rehabilitation can be used in dogs that surgery isn't an option but also after surgery to speed the recovery. Stem cell therapy and chiropractor adjustments are not recommended at this time.

8. What is the chance of success?

Success rates are listed in #5 and #6. Successful treatment of IVDD depends on several factors.

- A: Early recognition and treatment.
- B: An accurate and early diagnosis.
- $C: An \ experienced, \ board-certified \ neurologist/neurosurgeon.$
- D. The severity of the injury.

9. What is the likelihood of recurrence?

Unfortunately, dogs that slip one disk are at risk for slipping another one at some point in their life. At Southeast Veterinary Neurology, we perform a preventative procedure on all dachshunds that elect surgery for their disk herniation. This decreases the likelihood of recurrence from 50% (without surgery) to 10-15% (with surgery).

10. What can you do to prevent IVDD?

Unfortunately, there is nothing that can 100% prevent intervertebral disk disease in dachshunds. Back braces, supplements, vitamins, glucosamine, etc aren't necessarily bad, but there is little evidence to show that they prevent disk herniations. The most important things you can do to minimize the likelihood of a disk problem and maximize the likelihood of a successful outcome are the following:

- A. Avoid high impact activities. Jumping onto furniture and running up and down stairs are two examples of 'high impact' activities that are relatively easy to avoid. We know it's tough to stop an excited dachshund from jumping, but try to limit this.
- B. Keep your dachshund at a good body weight. By staying lean, there is less stress on the spine and disks. Additionally, dogs that do slip disks are often easier to treat (with or without surgery) if they are at a good body weight.
- C. Know the symptoms of IVDD. IVDD can cause symptoms ranging from pain (crying, whining, not wanting to move, holding the head low, arching the back, muscle spasms), walking wobbly in the back legs or all four legs (walking like they are 'drunk', crossing the legs, scuffing the toes, or turning over of the limbs and walking on the tops of their feet), to inability to use the limbs. At the first sign of any of these, you should immediately crate rest your dachshund and call your veterinarian.
- D. Know your local neurologist. Board-certified neurologists are experts in intervertebral disk disease. Neurologists spend an additional four years of training after veterinary school specializing in neurology and neurosurgery. They are the best people to let you know how affected your pet is and what options you have with regards to treatment and prognosis.
- E. Be prepared for the cost. Veterinary medicine and specialized care such as MRI and spinal surgery can get expensive. Many pet insurances cover intervertebral disk disease.

We hope you find this information useful. We hope you and your dachshund never need Southeast Veterinary Neurology, but if you do, we are available 24/7/365. Southeast Veterinary Neurology employs five board-certified neurologists and a veterinarian certified in physical rehabilitation. With locations in Boynton Beach, Fort Lauderdale and Miami, we are truly South Florida's Leader in Veterinary Neurology, Neurosurgery and Advanced Imaging.