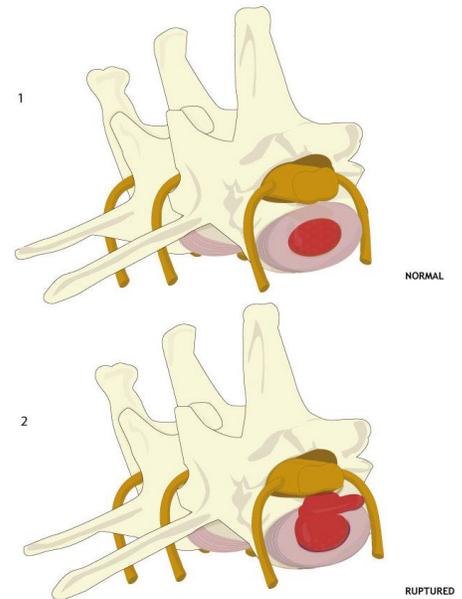


Intervertebral disk disease (IVDD)

What is Intervertebral Disc Disease?

An intervertebral disc is essentially a cushion in between the bones of the spine. These discs, under the influence of certain forces, can become swollen or even rupture over time, ultimately causing damage to the spinal cord. The rupture can be either progressive, in which case it is more likely to be detected in time for treatment, or immediate, which may cause some added complications. This disease is most prevalent in chondrodystrophoid breeds (breeds with dwarfism in the genes) of dogs, such as the Dachshund, Pekinese, Beagle, and Lhasa Apso breeds.

Intervertebral disc disease (IVDD) is the rupture of discs that serve as cushions between the vertebrae of the spine. It is common in breeds with dwarfism. Possible symptoms include pain, loss of limb function and loss of feeling. Treatment options include medications and two types of surgery. Depending on the damage to the spine, there is a risk of the dog being paralyzed, though dogs with minimal damage have a good prognosis.



Symptoms of Intervertebral Disc Disease in Dogs

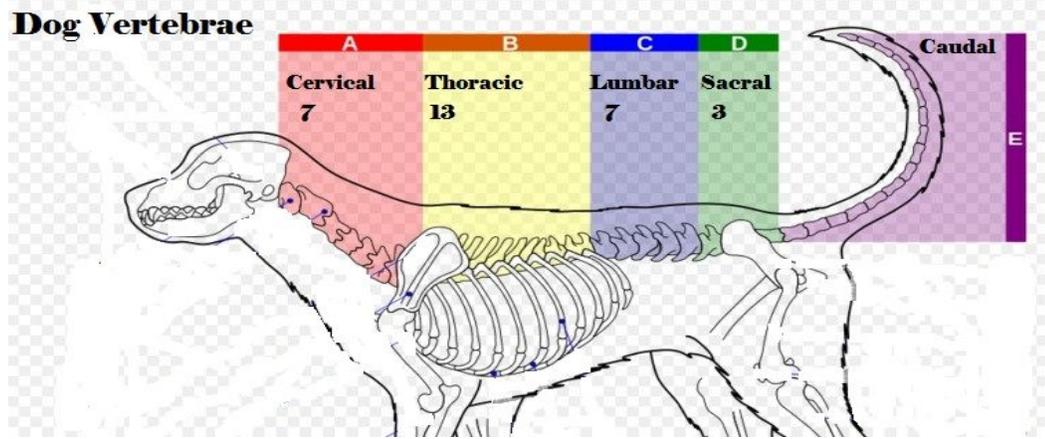
Because this disease causes intervertebral disc rupture that damages the spinal cord, varying degrees of pain occur. Some possible symptoms your dog may display include:

- Pain in the back or neck, typically causing refusal to walk or look around
- Loss of hind limb function
- Loss of ability to urinate Loss of experiencing pain (in severe cases)
- Hesitant to go up or down stairs
- Neck muscles are tense, may spasm
- Reluctance to jump
- Tense abdomen
- Restlessness
- Vocalization of pain

Types

Intervertebral disc disease can be categorized by the location of the spinal cord where the damage occurs. This grouping classification is called neurolocalization, and assists in diagnosis and treatment.

Location-based types - Large regions of the spine are used to classify disc ruptures. These are broken down into the cervical vertebral 1-5, cervical vertebrae 6 through thoracic vertebrae 2, thoracic vertebrae 3 through lumbar vertebrae 3, and lumbar vertebrae 4 through the sacrum.



Causes of Intervertebral Disc Disease in Dogs

Intervertebral disc disease can be caused by one of two types of damage to the spinal cord: compression and concussion.

- Compression is usually the result of gradual degeneration, causing the central gel of the disc to lose its fluid and become more susceptible to general wear and tear. When this occurs, normal life may cause the central portion of the disc to rupture into or through the outer layer, putting pressure on the nerves and spinal cord. This is often referred to as a slipped disc.
- Concussion, alternatively, is when the disc is ruptured in one immediate motion, sometimes resulting in paralysis. This is not typically caused by any one event, rather a combination of everyday activity and deterioration of the disc.

Diagnosis of Intervertebral Disc Disease in Dogs

The method of diagnosis will depend largely on your dog's symptoms and breed. If your dog is predisposed to intervertebral disc disease, such as chondrodystrophoid breeds, there is a high chance that intervertebral disc disease is the problem. Depending on symptoms, some tests may be completed to rule out other spinal problems. Possible diagnostic tests include:

- Physical exam
- Neurologic exam
- Complete blood work
- Serum chemistry
- Urinalysis
- X-rays
- Myelogram (spinal x-ray using a dye to highlight compression) and anesthesia
- MRI
- CT Scan
- Spinal tap

Treatment of Intervertebral Disc Disease in Dogs

The course of treatment that the doctor ends up suggesting will depend directly on the severity of the damage directly to the spinal cord. If this is the first occurrence and the spinal cord has minimal damage, conservative treatment such as cage rest, confinement, and pain medications may be an option. For any greater damage, the following alternative treatment options exist:

- Depending on the severity of damage, medications may be used. Some common medications include nonsteroidal anti-inflammatory drugs or corticosteroid drugs.
- If the case is that the damage is unquestionably severe, and medication driven treatment is ineffective, surgery may be necessary. Neurosurgery is an option, and should be done by an outside expert in the field. Expect to have another round of x-rays as part of the preparation for surgery. There are two types of operational surgery that may be done: fenestration and decompressive surgery. Which surgery is best for your pet will be determined by the diagnostic tests and x-ray results.

Recovery of Intervertebral Disc Disease in Dogs

Recovery and management depends largely on the course of treatment. After surgery, Most pets are discharged within 3-7 days. Possible post-surgery restrictions include bladder expression 3-4 times a day, rehabilitation and bed rest for at least four weeks. Complications may include seizures, infection of the incision, continued trouble walking, additional herniated discs later in life. Depending on the severity and complexity of the spinal damage, the biggest risk is the loss of the ability to walk. For most cases where damage isn't excessively severe, though, the dog's chance of walking again is high.