Two kinds of

Intervertebral Disc Disease

Intervertebral disc disease is a condition that affects your dog's spine. The intervertebral disc herniates into the spinal canal, either as a result of slow degeneration of the disc material over time, or suddenly.

When the disc material protrudes into the spinal canal and places pressure on the spinal cord, your dog starts to show symptoms that indicate a lack of nerve conduction to the back of their body.

The severity of the symptoms will depend on how much disc material is in the spinal canal, how badly the spinal cord is being compressed, and at which spinal level the disc prolapse occurs.

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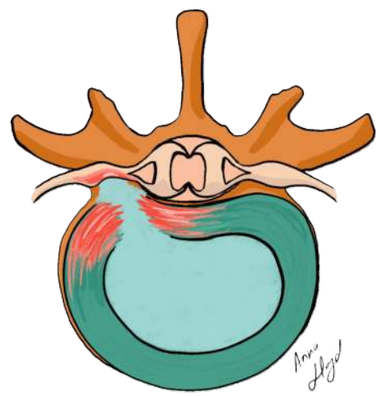
Hansen Type I IVDD

This is an **acute extrusion** of the nucleus pulposus through a rupture in the annulus fibrosis.

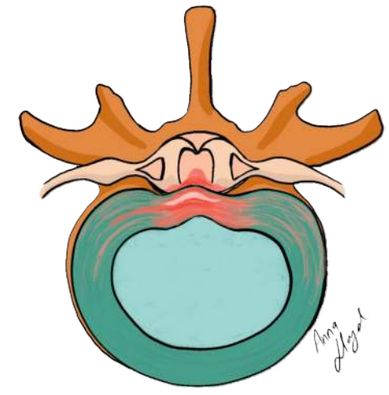
The clinical severity and presentation can have a very wide range, with a good prognosis of recovery for all but the most severely affected dogs.



Hansen Type 2 IVDD

This is a **chronic protrusion** as the annulus fibrosis stays intact but bulges into the vertebral canal.

This can occur at multiple vertebral levels, making it challenging to determine which disc is the biggest concern.

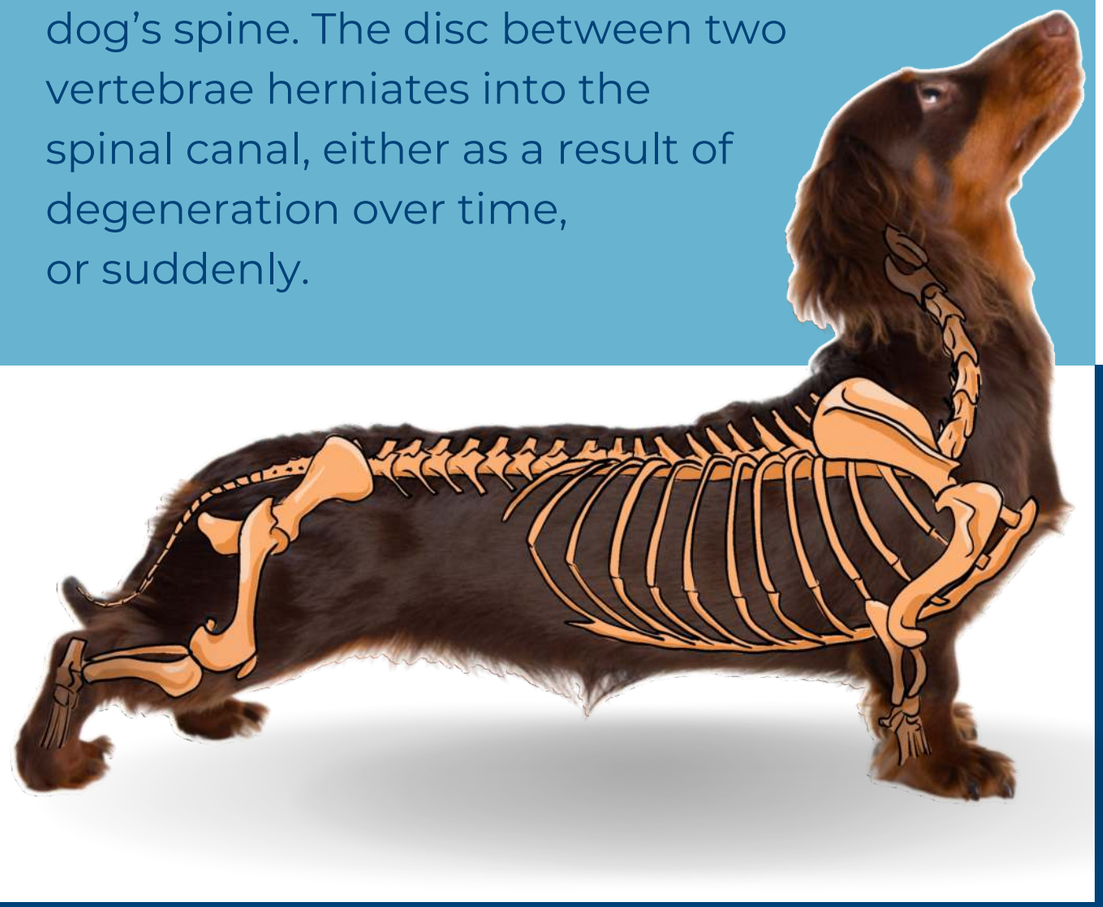


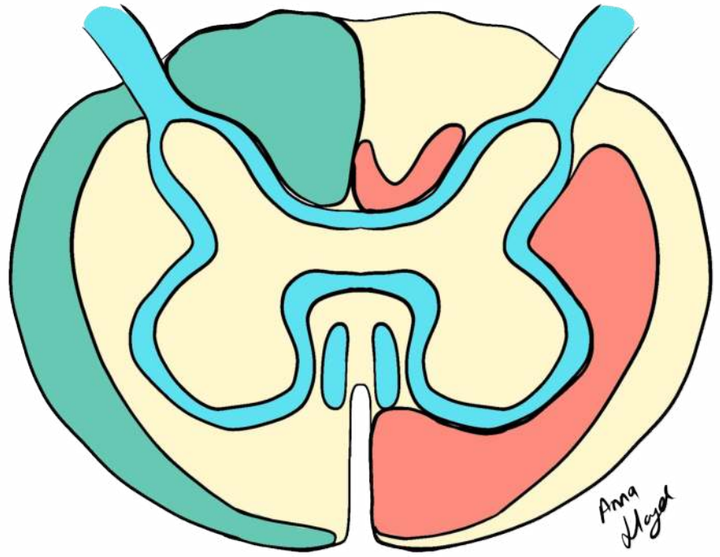


Your Guide To

Intervertebral Disc Disease

Intervertebral disc disease affects your dog's spine. The disc between two vertebrae herniates into the spinal canal, either as a result of degeneration over time, or suddenly.





4. Deep pain sensation
3. Superficial sensation
2. Motor control
1. Proprioception

1.
2.
3.
4.

Ascending tracts (towards brain ⟶ sensory)

Descending tracts (towards limbs ⟶ motor)

Mixed Tracts

When an intervertebral disc herniates into the spinal cord, it will compress the spinal cord from the bottom up. The nerve pathways on the outside and bottom of the spinal cord are responsible for transmitting messages related to **proprioception.** The next level of compression affects the nerves that are responsible for **coordinated movemen**t. Following that, compression will affect their ability to feel **superficial sensations** on their skin or under their feet. The deepest neural pathways in the spinal cord are responsible for **deep pain sensation.**

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