



THORACOLUMBAR INTERVERTEBRAL DISK DISEASE

TREATMENT OF A SLIPPED DISK IN THE SPINE

VSA

ADVANCED VETERINARY CARE
SYLVIA PARK • AUCKLAND

THORACOLUMBAR INTERVERTEBRAL DISK DISEASE

TREATMENT OF A SLIPPED DISK IN THE SPINE

The most common cause of hind leg paralysis in the dog is injury to the spinal cord from a slipped (ruptured) disk in the spine. This injury can cause permanent problems with normal activity and urination. Generally, urgent treatment is required to reduce the risk of permanent disability.

DISK FUNCTION

The intervertebral disk of the dog acts as a cushion between the spinal bones (vertebrae) to absorb the shocks and movements of normal activity. The normal disk is like a “jelly doughnut” with a gelatinous centre and an outer ring of stronger fibrous tissue. In certain breeds of dog (Dachshund, Poodle, Jack Russell terrier, Corgi), the disk degenerates at a very early age. As the dog ages, the jelly-like component of the disk becomes more gritty and less resistant to pressure. The disk is then no longer able to cushion the spine and the contents of the centre may forcibly squirt out and bruise the spinal

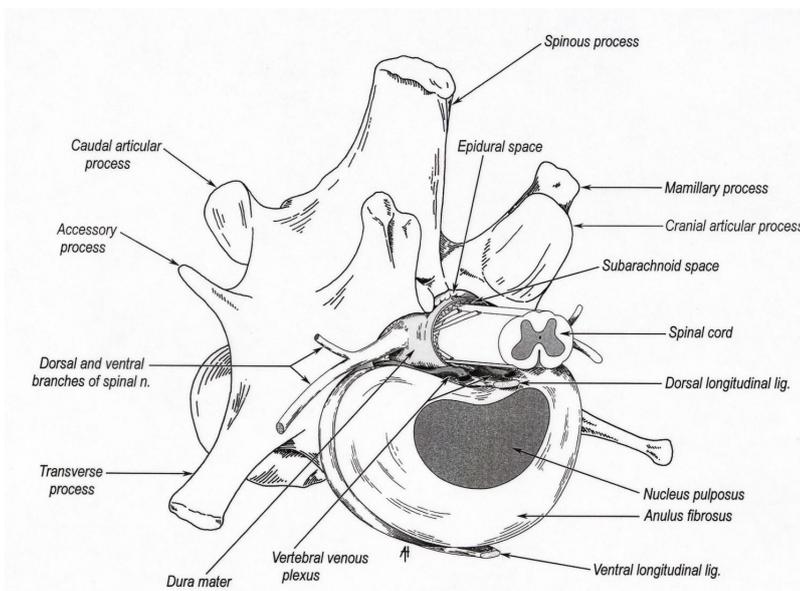
cord. Alternatively, the outer part of the disk may bulge up putting pressure on the spinal cord.

SYMPTOMS

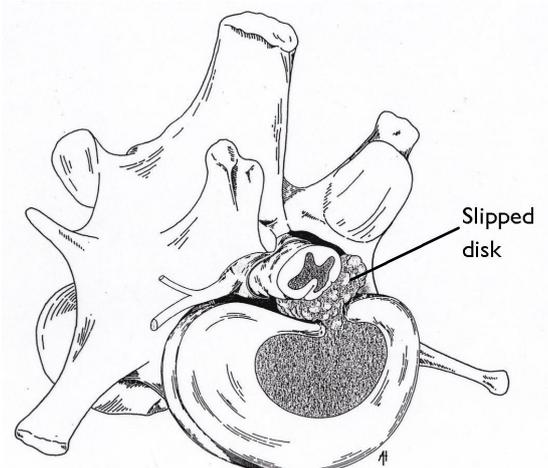
Symptoms typically develop, in order of severity, from back pain to weakness and wobbliness then finally to complete paralysis depending on the speed or the amount of the disk rupture. In the most severe cases, dogs lose the feeling (deep pain) in their toes even when a firm pinch is applied. Some dogs can still pull their leg back when pain sensation is lost but this is simply a reflex and does not indicate the amount of spinal cord damage present.

PROGNOSIS

The prognosis for recovery is mostly dependent on the severity of the damage to the spinal cord. The ability to feel deep pain in the back legs and tail is the key indicator for prognosis in dogs with paralysis due to a slipped disk.



Normal vertebra and disk



DIAGNOSIS

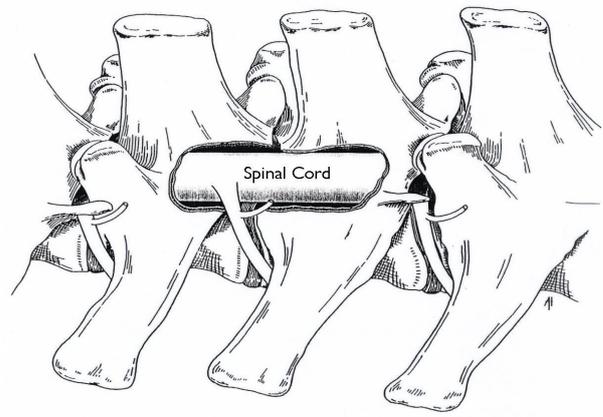
Knowledge of the dog's history is essential in helping make a diagnosis. A thorough neurologic examination is performed evaluating the head, all four limbs, and the spine. Pain can frequently be felt at the site of the affected disk. Anesthesia and X-rays can help to show signs of narrowed disk spaces and degenerative disks. To confirm the diagnosis, a **CT scan** is recommended as this provides us with the best information on the spine. A special X-ray test called a **myelogram** can be helpful, in addition, to a CT scan.

MEDICAL TREATMENT

Some dogs with only mild symptoms will respond to medical treatment. Generally this involves three or four weeks of strict confinement to a cage with the dog only allowed out to go to the toilet. Pain relief (cortisone or aspirin-like medication) is given at the same time but this does not mean the dog can be more active. Dogs that do not improve or get worse with medical treatment are candidates for surgery.

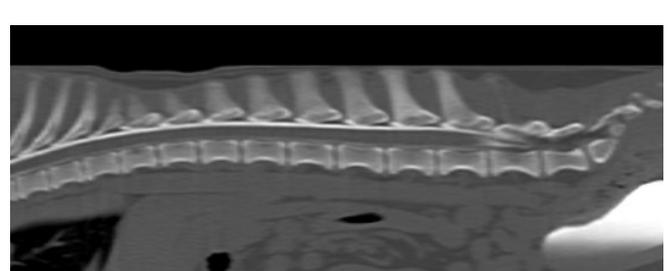
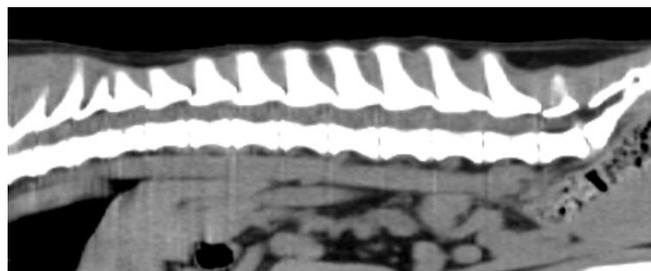
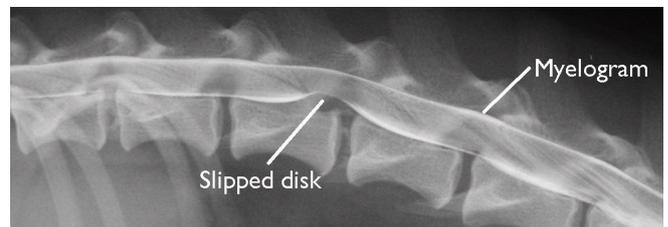
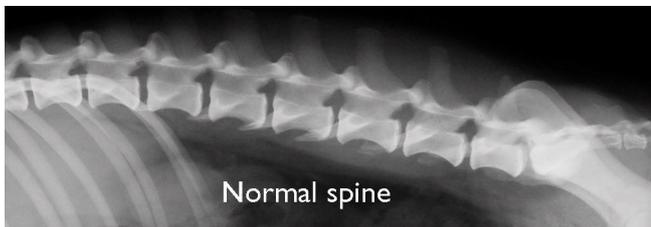
SURGERY

Dogs that have significant spinal cord damage are also candidates for surgery. The most common procedure is a **hemilaminectomy**, which involves drilling away one wall of the vertebrae to relieve the spinal cord pressure and allow the delicate extraction of the disk material. Sometimes, the central portion of adjacent degenerative disks is removed to reduce the chance of further disk rupture.



RESULTS

Dogs that have retained the ability to feel their toes prior to surgery have a 95% chance of walking again following surgery. Complete healing of the spinal cord can take up to six months to occur. Regular progress in spinal cord recovery is seen during this time.



POSTOPERATIVE CARE

EXERCISE CONTROL

To allow the spine to heal following the surgery, complete restriction of exercise is necessary for the first 3 weeks. Your dog can be walked on a lead for toileting. Light (5-15 minutes) lead walks can begin after 2 weeks.

BANDAGE AND SUTURE REMOVAL

A bandage is generally placed over the operated site for protection. This bandage should be removed 4-5 days after surgery. The skin stitches need to be removed 10-14 days following surgery. These tasks can be done by your regular veterinarian. Please call our hospital if there is any swelling, discharge or redness around the stitches.

BLADDER MANAGEMENT

Some dogs have lost the ability to control urination after surgery. If the bladder is not emptied completely, then infection can develop. You may need to assist your dog with urination. With your dog lying or standing place your hands in a "prayer-like" fashion behind the last ribs. Apply equal inward pressure and gently

expel the urine. Several attempts may be necessary to be successful.

MEDICATION

Most dogs are sent home with medication for additional pain relief. Sometimes, antibiotics are also dispensed. Give the medications as prescribed. Further pain relief can be prescribed if necessary.

PHYSIOTHERAPY

Physiotherapy is an important part of your dog's recovery. We strongly recommend a consultation with a recognized animal physiotherapist. Home-based physiotherapy should consist of a warm compress applied to the region of the stitches for 15 minutes followed by gentle massage of the muscles. This can be followed by gentle flexing and extending of the legs. After the spine has healed, your dog can begin more active physiotherapy with regular controlled exercise. Running without leash control is recommended for only short periods. Regular swimming is an excellent way of providing active exercise without spinal stress.



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