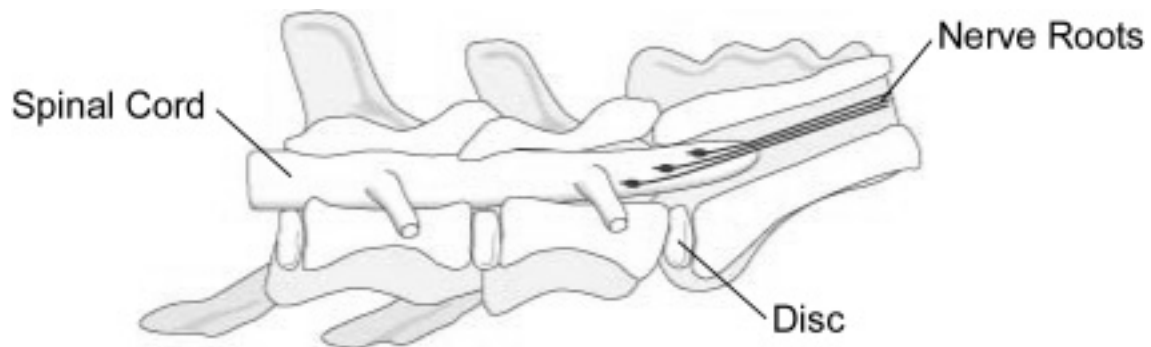


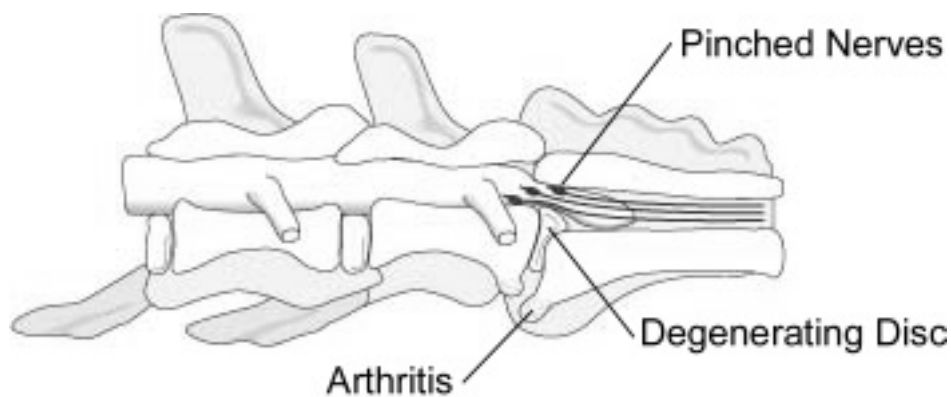
Treating Low Back Problems

Low back problems occur more often in dogs than in cats. Degeneration of the bones of the low back can result from congenital deformities of the lower lumbar or sacral vertebrae (most commonly seen in German Shepherds).

Low back problems also can be caused by disc problems (found in small and large breeds), infections or traumatic injuries. Arthritic symptoms generally result. As the arthritis progresses, the vertebrae continue to degenerate. The nerves in the lower back can become pinched causing a disease called Cauda Equina Syndrome (figs. 1 and 2).



NORMAL LOWER BACK
(Fig. 1)



ABNORMAL LOWER BACK
(Fig. 2)



Symptoms

Affected animals are usually stiff in the morning and following exercise. Due to the associated pain, they are reluctant to stand on their hind legs, jump up or be petted on the lower back. They often experience lameness in one or both hind legs and may occasionally yelp out in pain. Some affected animals will lose muscle tone to the tail and will start inexplicably chewing their rump and tail areas. In severe cases, animals will lose control of bowel and bladder function.

Diagnosis and treatment

Medical treatment with steroids can lessen these clinical symptoms, however, there are side effects. Also, it cannot stop progressive degeneration and further nerve damage. Surgery is usually the best option in cases of Cauda Equina Syndrome.

Signs such as tail chewing, lameness, pain over the lower back, and incontinence are caused by nerve root pressure that occurs in Cauda Equina Syndrome. Other diseases such as allergies, orthopedic problems, and urinary tract infections can cause similar symptoms. Therefore, it is essential that a good physical examination, appropriate laboratory tests, and radiographic procedures are performed to determine the exact cause of your pet's difficulty.

Electromyography

This procedure is beneficial in determining the extent of nerve damage. It is also used in subtle cases to confirm a diagnosis of Cauda Equina Syndrome. Your pet is anesthetized to assure complete comfort during the study which takes approximately 30 to 60 minutes to perform. Nerve and muscle function to the back, legs, rump, and tail are measured by inserting tiny needles into these various muscle groups and evaluating their electrical activity. Abnormalities may suggest Cauda Equina Syndrome.

Myelography

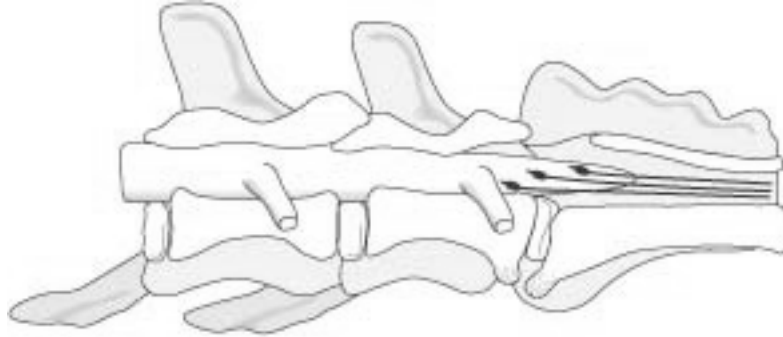
Standard radiographs of the lower back can be very useful in assessing the spine for congenital, arthritic, infectious, or malignant diseases. These studies are more accurately performed while your pet is under general anesthesia to allow exact positioning of the spine.

After routine radiographs have been taken, a myelogram is performed. In this technique, a contrast dye is injected to outline the spinal cord. Another series of radiographs is taken and, because of the contrast dye, we can often pinpoint the cause and location of the low back problem. This procedure helps us determine what type of surgical approach is appropriate. In some cases, an MRI is performed instead of a myelogram.

Surgery

Surgery often can be performed immediately following a myelogram, reducing the need for additional anesthesia and hospitalization. The surgical procedure (laminectomy) opens up the vertebrae (spinal canal) to show the spinal cord and nerves as they exit the spinal cord. Any bone spurs, ruptured discs, or other pressure producing problems can be cut away to relieve pressure on the spinal cord or nerve roots. If necessary, the openings through which the nerves leave the

vertebrae (spinal canal) also can be widened to eliminate pinching and pressure caused by arthritis or a buildup of bone in these areas (fig. 3).



LOW BACK FOLLOWING SURGERY
(Bone removed and nerves no longer pinched)
(Fig. 3)

Following Surgery

In some cases, animals experience a temporary set back in their neurological abilities following surgery. This condition is related to the myelogram, a drop in spinal cord blood pressure, and spinal cord/nerve root manipulation that is performed during surgery. If this occurs, you can usually expect your pet to be able to walk and gradually return to its preoperative status within three to four weeks.

As your pet gradually improves following successful surgery, the preoperative pain, lameness and incontinence should resolve. Some animals are markedly improved within four to eight weeks, while others show a slow, gradual improvement over six months or more. Although no guarantees can be given with any medical or surgical treatment, most low back problems will respond favorably to proper treatment. The rate of recovery depends, in part, on the age and general health of your pet as well as the chronicity of the problem at the time of surgery.

Conclusion

VCA Animal Specialty Group can make an accurate prognosis for the success of surgery only after a thorough medical, physical and neurological examination of your pet. For an evaluation or further information about Cauda Equina Syndrome in pets or other neurological disorders, please call VCA Animal Specialty Group.