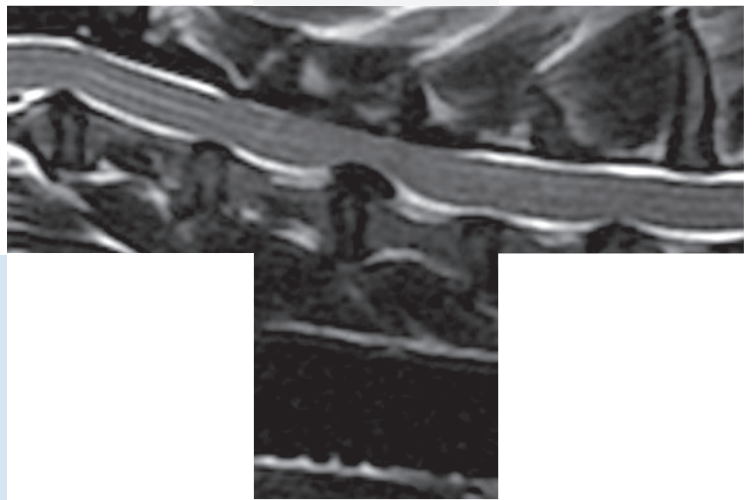
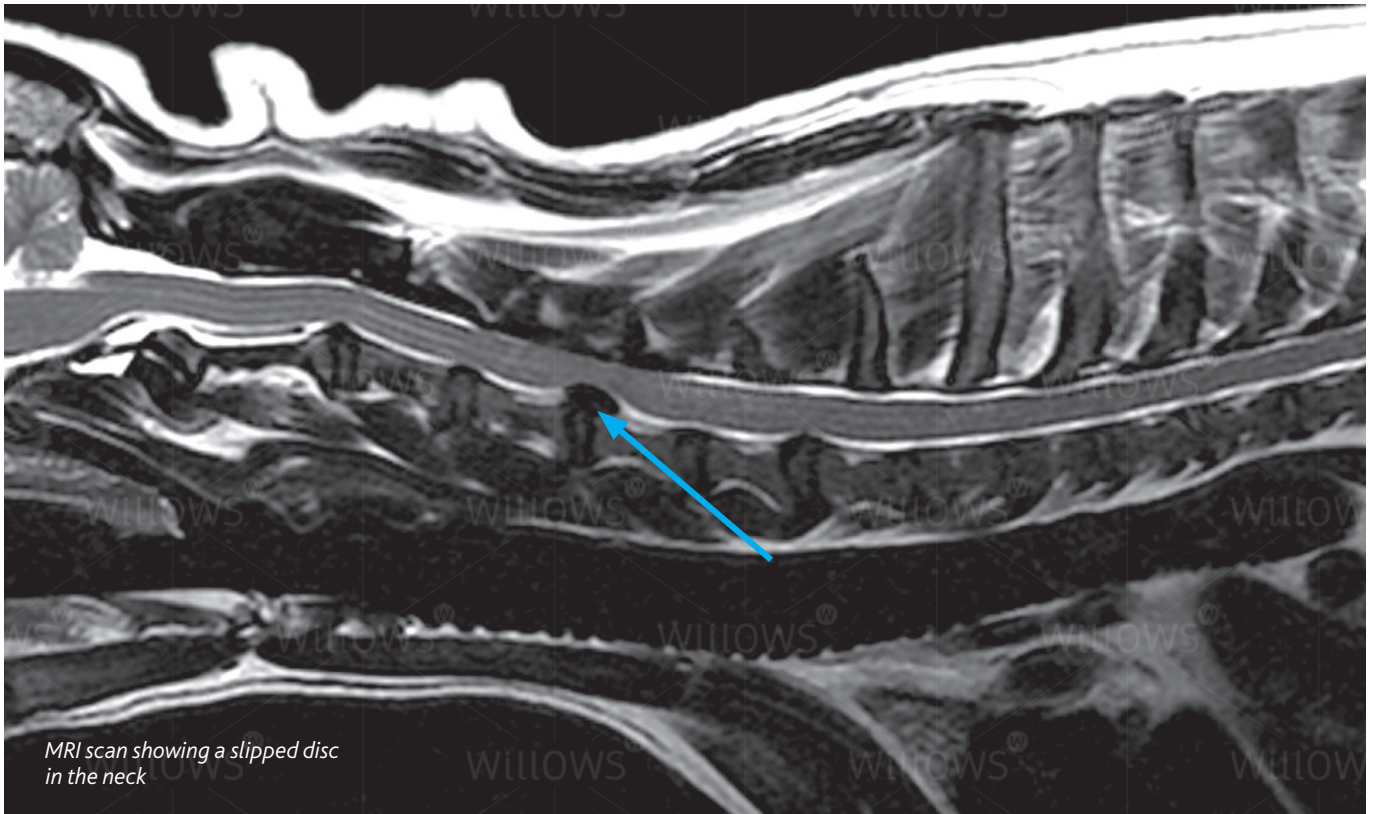


Specialist Referral Service
Willows Information Sheets

Cervical disc disease





Cervical disc disease

What is meant by cervical disc disease?

A more common term for cervical disc disease is a 'slipped disc' in the neck. The discs are the structures between the bones of the spine (vertebrae) that act as shock absorbers. They consist of a soft centre (the nucleus pulposus) inside a fibrous ring (the annulus fibrosus).

As in people, discs in dogs degenerate as they get older. This process results in the discs becoming dehydrated and losing their cushioning effect. They may then 'slip' in one of two ways. Firstly, the material in the centre of the disc can come out of the fibrous ring and injure the spinal cord (this is called a disc extrusion). Secondly, the fibrous ring may thicken and compress the spinal cord (this is called a disc protrusion). Either type of 'slipped disc' may cause neck pain and nerve injury.

Could my dog have cervical disc disease?

Any dog can develop a 'slipped disc' in their neck, although the condition is very uncommon in dogs less than two years of age. Certain breeds, especially the ones with short limbs such as Dachshunds and Shih Tzu, are particularly affected.

Signs may develop gradually or extremely quickly. Dogs can go from normal to having severe neck pain within a few minutes.

Signs of cervical disc disease are either due to (1) neck pain or (2) nerve injury.

1 Neck pain

Signs of neck pain may be obvious e.g. yelping and crying or rigidity of the neck. More subtle signs include reluctance to jump or climb and low head carriage. Difficulty lowering the head to eat from the floor may be evident.



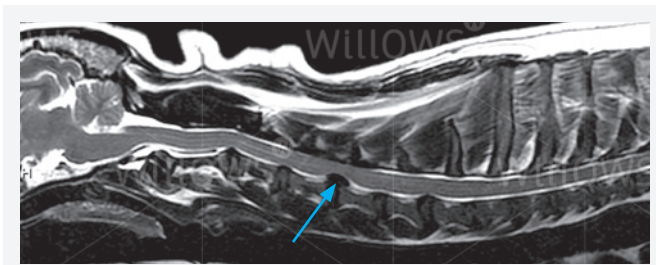
Cocker spaniel with low head carriage due to cervical disc disease

2 Nerve injury

Signs of nerve injury are uncommon with cervical disc disease, in contrast to thoracolumbar disc disease ('slipped disc' in the back). This is because of the greater space in the neck between the spinal cord and the surrounding bone. Occasionally discs that 'slip' in the neck can sufficiently compress the spinal cord to cause weakness or inco-ordination of all four limbs. Inability to walk and incontinence are very uncommon.

How is cervical disc disease diagnosed?

A neurological examination is necessary to detect evidence of spinal cord injury and neck pain. There are many other causes of neck pain and nerve injury in addition to cervical disc disease. As a result investigations are necessary to confirm a 'slipped disc' and exclude these other conditions.



MRI scan showing a slipped disc in the neck

Normal X-rays (radiographs) of the neck may reveal evidence of cervical disc disease, such as a narrowed disc space or a calcified disc. However, more advanced investigations are necessary to see which disc has actually slipped and to assess the severity of any spinal cord compression. Of these advanced imaging techniques, an [MRI scan](#) provides the best method of investigating cervical disc disease. Instead of X-rays, MRI uses high powered magnets and a computer to generate images of the spine. MRI provides information not only on the health and position of the discs in the neck but also on the nature of any injury to the spinal cord. This makes diagnosis more accurate and assists greatly in deciding the best course of treatment for the individual patient.

Myelography is another imaging technique which can be used for investigating cervical disc disease. This involves injecting a dye (contrast agent) around the spinal cord and obtaining multiple X-rays to assess the flow of the dye to see if it is interrupted at the site of the slipped disc. Injecting around the spinal cord is not without risk of causing further damage to already compromised nerve tissue. MRI is less invasive than myelography with less risk of side-effects, and for most patients MRI provides the best option for investigation. Both MRI and myelography require the dog to have a general anaesthetic.

Occasionally it is necessary to collect some fluid (cerebrospinal fluid - CSF) from the spine and send it to a laboratory for analysis. This test assists in the diagnosis of inflammatory conditions that affect the spine.

How can cervical disc disease be treated?

The two principle methods of managing cervical disc disease are (1) conservative treatment and (2) surgery.

1 Conservative treatment

When dogs with cervical disc disease are managed conservatively their exercise must be restricted. Short walks on a harness for toileting purposes may be necessary, with strict confinement at other times. The hope is that the 'slipped disc' will heal, any neck pain subside and the spinal cord recover from any injury. Painkillers may be necessary and possibly other drugs such as muscle relaxants.

2 Surgery

The aims of surgery are to remove any disc material that is compressing the spinal cord and to prevent any more disc material 'slipping'. Decompressive surgery involves removing a section of bone from the bottom of the spine (ventral slot) to enable retrieval of disc material. Further 'slipping' is prevented by removing any remaining material in the centre of the disc (disc fenestration). Occasionally vertebral stabilisation (fusion) procedures are necessary, especially in large dogs.

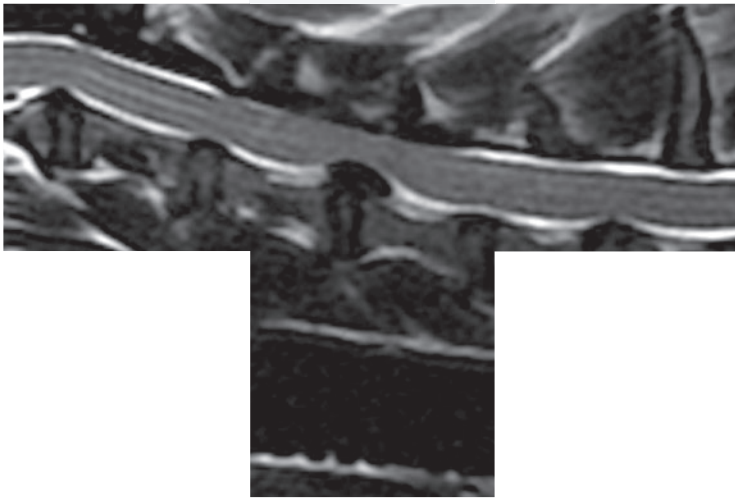
What is the outlook with cervical disc disease?

The outlook or prognosis with cervical disc disease is generally good. Conservative management can be successful in cases with neck pain and no evidence of spinal cord injury, such as weakness and inco-ordination. Unfortunately some dogs continue to deteriorate with this approach or recover only to have a recurrence weeks or months later.

The success rate with surgery is generally high provided that the spinal cord hasn't been compressed for a long time (chronic spinal cord injury). Chronic cord injuries can be treated successfully with surgery, but the outlook is less favourable than it is for short-term (acute) injuries.

If you have any queries or concerns, please do not hesitate to [contact us](#).

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