




# Cervical Radiculopathy (Pinched Nerve)



Some people have neck pain that may radiate into the shoulder and arm. This type of pain is often caused by an injury near the root of a spinal nerve. A nerve root injury is sometimes referred to as a "pinched" nerve. The medical term for this condition is cervical radiculopathy.

Understanding your spine and how it works can help you better understand cervical radiculopathy. Learn more about your spine: Spine BasicsSpine Basics (topic.cfm?topic=A00575)

## Cause

As disks age, they lose height and begin to bulge. They also lose water content and become stiffer.

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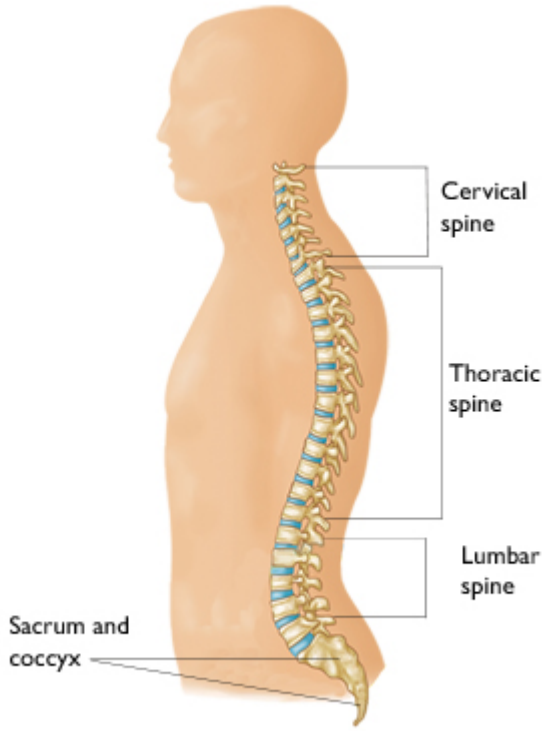


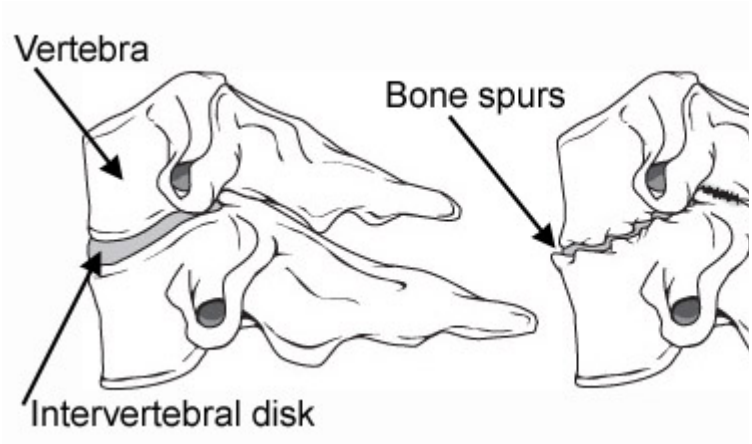


(Left) Side view of a healthy cervical vertebra and disk. (Right) A disk that has degenerated and collapsed.

As the disks lose height, the vertebrae move closer together. The body sees the collapsed disk as a possible weak area and responds by forming more bone — called spurs — around the disk to strengthen it. The bone spurs that form also contribute to the stiffening of the spine. Bone spurs may also narrow the area of the foramen and pinch the nerve root.

The disk changes that occur with age are often called arthritis or spondylosis. It is important to keep in mind that all these changes are "normal" and they occur in everyone. In fact, if MRI scans were performed on all people aged 50 or older, nearly half of the scans would

show worn disks and pinched nerves that do not cause painful symptoms. It is not known why some patients have symptoms and others do not.

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## Symptoms

Cervical radiculopathy pain travels down the arm in the area of the involved nerve. Pain is usually described as sharp. There can also be a "pins and needles" sensation or even complete numbness. In addition, there may be a feeling of weakness with certain actvities.

Symptoms can be worsened with certain movements, like extending or straining the neck or turning the head. These symptoms are often made better by placing the hand on the head and stretching the shoulder.

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## Doctor Examination

After discussing your medical history and symptoms, your doctor will examine your neck. This will include testing your strength and sensation as well as reflexes. Your doctor may also have you do certain neck and arm movements to try to recreate or relieve your symptoms.

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## Tests

**X-rays**

X-rays can show the alignment of bones along the neck. They can also show any narrowing of the foramen and disks.

**Computed tomography (CT)**

CT scans show the bones of the neck in finer detail. Bone spurs can be seen with CT, especially spurs near the foramen.

**Magnetic resonance images (MRI)**

An MRI of the neck can show if nerve compression is caused by soft tissue, such as a bulging disk and herniations. MRI can also show the appearance of the spinal cord and nerve roots.

**Electromyelography**

Electromyography and nerve conduction studies may be able to help show the difference between symptoms caused by pressure on spinal nerve roots

and nerve damage caused by other ailments, such as diabetes.

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## Treatment

It is most important to note that the majority of patients with cervical radiculopathy get better with time and never need surgery, or even any treatment at all.

Some patients will have the pain go away quickly over days to weeks, while others take longer. It is also not uncommon for cervical radiculopathy to come back at some time in the future, but again, this problem usually gets better without any specific treatment. Some patients do develop persistant symptoms and require evaluation and treatment for the arm pain or weakness.

### Nonsurgical Treatment

If you are not getting better, your surgeon will recommend a course of treatment. Treatment for radiculopathy starts with nonsurgical options.

**Soft Collars.** Soft collars allow the muscles of the neck to rest and limit neck motion. This can help decrease pinching of nerve roots with movement. Soft collars should only be worn for short periods of time, because long-term wear can decrease the strength of neck muscles.

**Physical Therapy.** Physical therapy can help with neck muscle stretching and strengthening. Sometimes, traction is also used.

**Medications.**

- **Nonsteroidal anti-inflammatories (NSAIDS).** These include drugs like aspirin and ibuprofen, and may be helpful if the arm symptoms are from nerve swelling.
- **Oral corticosteroids.** A short course of oral corticosteroids may also help reduce swelling, as well as pain.
- **Narcotics.** These medications are reserved for patients with severe pain that is not relieved by other options. Narcotics are usually prescribed for a limited time only.
- **Spinal injections.** Sometimes, an injection of steroids can be placed near where the

nerve is being pinched. This takes advantage of the anti-inflammatory effects similar to oral steroids. The injection may be placed between the laminae (epidural steroid injection), in the foramen (selective nerve injection), or into the facet joint.

While steroid injections do not take the pressure caused by a narrow foramen or herniated disk off the nerve, they may lessen the swelling and relieve the pain enough to allow the nerve to recover with more time.

**Surgical Treatment**

There are several surgical procedures for radiculopathy. The procedure that is right for you will depend on many factors, most importantly the type of problem you have.

Learn more about surgery and radiculopathy: Surgical Options for Cervical RadiculopathySurgical Options for Cervical Radiculopathy (/topic.cfm?topic=A00540).

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Related Links

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