

Cervical Radiculopathy

What is a Cervical Radiculopathy?

Cervical radiculopathy (ra·dic·u·lop·a·thy) is when a nerve in your neck gets irritated. It can cause pain, numbness, tingling, or weakness. Neck pain does not mean you have a pinched nerve, although it may be present.

What causes cervical radiculopathy?

Factors that cause cervical radiculopathy include:

- Bulging or herniated discs
- Bone spurs

These are all common and result from normal wear and tear. A nerve may be irritated by a particular activity (reaching, lifting), a trauma (such as a car accident or fall), or no clear cause at all, other than normal life activity. Smoking does increase the wear and tear so it is important to quit smoking.

What is a herniated disc?

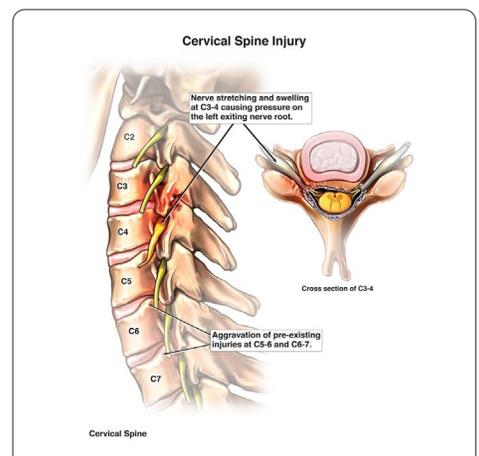
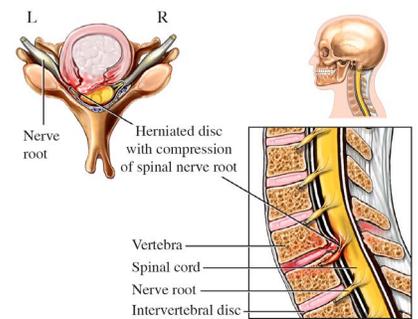
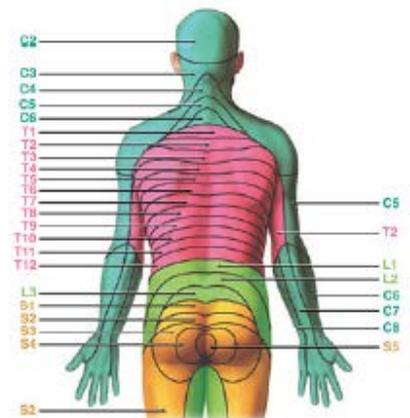
Your discs act like cushions between the bones in the neck. When the outer coating of the disc (the annulus) weakens or is injured, it may no longer be able to protect the soft spongy material (the nucleus) in the middle of the disc. At first the disc may bulge, eventually the nucleus can break through the annulus. This is called a herniated disc.

What is a bone spur?

Bone spurs are caused by pressure and extra stress on the bones of the spine (or vertebrae). The body responds to this

Dermatome: The area of the skin supplied by a single, specific, spinal nerve root

- Cervical dermatomes
- Lumbar dermatomes
- Thoracic dermatomes
- Sacral dermatomes





constant stress by adding extra bone, which results in a bone spur. Bone spurs can pinch or put pressure on a nerve.

What are the common signs and symptoms of cervical radiculopathy?

- Pain in neck, shoulder blades, shoulder, and/or arms
- Tingling or numbness in arms
- Weakness in arm muscles
- Limited functional ability for tasks such as reaching, lifting and gripping, or prolonged head postures as in reading.

What is the treatment for cervical radiculopathy?

Most spine problems heal over time without surgery within 6 to 12 weeks. Most injuries will heal with rest and self-care. Your health care provider may also suggest early treatments to focus on pain relief. These may include:

- Activity changes such as avoid reaching too far, tipping your head back or to the side, heavy lifting or strenuous activity.
- Wearing a neck collar to help limit pain.
- Medicines to relieve pain, reduce muscle spasms, and reduce inflammation in your neck.
- Physical therapy and education to learn about exercises to increase flexibility and improve posture.
- Gentle neck manipulation and/or traction, usually done with guidance from a doctor specializing in osteopathy, chiropractic or physical therapy.
- Epidural Steroid Injections (ESI) are done under x-ray to reduce the swelling and pain near the irritated nerve.
- Surgery may be considered if there is significant weakness, worsening numbness, or if pain is not controlled by the above mentioned treatment options. Surgery is not usually performed before 6 weeks because the body is in the healing phase.

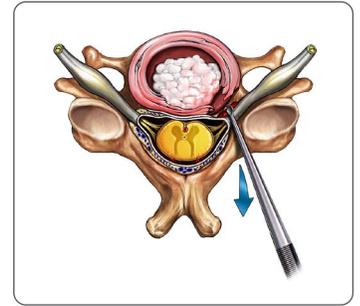
	Rest and Time	Non-Surgery	Surgery
Why might I choose this option?	<ul style="list-style-type: none"> Your pain is tolerable or improving and you want to give it more time. You can do most of your daily activities. You have other medical issues that can make injections or surgery more risky. 	<ul style="list-style-type: none"> If you have more neck than arm pain, physical or manual therapy may work better than surgery. Epidural injections usually help with the arm pain, but the nerve will still need time to heal. 	<ul style="list-style-type: none"> Your pain cannot be controlled with other treatments. Arm weakness, or pain and numbness is getting worse. At least 6 to 8 weeks of conservative care has not helped.
What are the success rates of each option?	<ul style="list-style-type: none"> Most people will see improvement with time, rest and conservative care over 2 to 6 months. After two years, 9 out of 10 people can see improvement. 	<ul style="list-style-type: none"> Most patients will improve without surgery with the greatest improvement in the first few months. Injections have been shown to be helpful for arm pain more than neck pain. 	<ul style="list-style-type: none"> Exact success rates are difficult to provide but up to 8 out of 10 feel the surgeries are successful overall and 90% have relief of arm pain. Surgery may not work better than conservative care when the primary symptom is neck pain.

	Rest and Time	Non-Surgery	Surgery
What are the risks?	<ul style="list-style-type: none"> Minimal risk but if you have progressive weakness or numbness, you should contact your provider to avoid permanent nerve damage. 	<ul style="list-style-type: none"> Physical and manual therapy have low risk as long as you are not getting worse. Injections have low risks with headache or short term increase in pain being the most common. Infections or nerve damage are very rare. 	<ul style="list-style-type: none"> Complication rates are different depending on the exact surgery discussed with your surgeon. Severe complications are rare.
How long will it take to resume my normal activity?	<ul style="list-style-type: none"> Some improvement may be seen within 6 weeks, but it may take up to 12 months for the pain, numbness and weakness to improve. 	<ul style="list-style-type: none"> Pain may improve faster with therapy or injections but it will be important to be careful with activities for a few months to give the nerve time to heal. 	<ul style="list-style-type: none"> Surgery can help your pain decrease faster than conservative care. Activities will be limited for at least 4 to 8 weeks after surgery.
Can this happen again?	<ul style="list-style-type: none"> Time does improve most cervical radiculopathies but having pain return at some point in the future is not unusual. The benefits of physical therapy are to teach you the best ways to reduce the risk of recurrence. 	<ul style="list-style-type: none"> Physical therapy can teach exercises and movements that help reduce the risk of symptoms returning. The benefits of injections are for temporary pain relief and do not affect long term outcomes. 	<ul style="list-style-type: none"> After spinal fusion, up to 15% may require a repeat surgery within 10 years as the spine continues to age. Disc replacement has a slightly lower risk of repeat surgery than fusion.

What are the surgery options for cervical radiculopathy?

Microdiscectomy / Laminotomy

The herniated disc is removed through a small incision in the back of the neck. With a laminotomy, the surgeon removes a sliver of bone in the back of the spine to make the canal for the nerve larger.



Cervical Fusion

In some cases two vertebrae are surgically linked together, this is called a fusion. A cervical fusion may be necessary if there is abnormal movement or alignment between the bones or if the bone spurs are too severe for a laminotomy alone.



Arthroplasty

This procedure removes the nerve compression by taking out the disc and replacing the disc with an artificial disc in its place.

There are many things that you can do to help your body heal and prevent another injury:

- Modify or avoid activities which increase the pain.
- Change positions often or rest in positions that lessen your pain.
- Be aware and use good posture when moving, sitting and standing.
- Use ice or heat for comfort.
- Do stretching and simple exercises in comfortable amounts.
- Stop smoking.
- Get enough sleep.
- Eat a healthy diet.
- Drink plenty of water to stay hydrated.



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