



Diseases and Conditions

Cervical spondylosis

By Mayo Clinic Staff

Cervical spondylosis is a general term for age-related wear and tear affecting the spinal disks in your neck. As the disks dehydrate and shrink, signs of osteoarthritis develop, including bony projections along the edges of bones (bone spurs).

Cervical spondylosis is very common and worsens with age. More than 85 percent of people older than age 60 are affected by cervical spondylosis.

Most people experience no symptoms from these problems. When symptoms do occur, nonsurgical treatments often are effective.

For most people cervical spondylosis causes no symptoms. When symptoms do occur, they typically include pain and stiffness in the neck.

Sometimes, cervical spondylosis results in a narrowing of the space needed by the spinal cord and the nerve roots that pass through the spine to the rest of your body. If the spinal cord or nerve roots become pinched, you might experience:

- Tingling, numbness and weakness in your arms, hands, legs or feet
- Lack of coordination and difficulty walking
- Loss of bladder or bowel control

When to see a doctor

Seek medical attention if you notice a sudden onset of numbness or weakness, or loss of bladder or bowel control.

As you age, the bones and cartilage that make up your backbone and neck gradually develop wear and tear. These changes can include:

- **Dehydrated disks.** Disks act like cushions between the vertebrae of your spine. By the age of 40, most people's spinal disks begin drying out and shrinking, which allows more bone-on-bone contact between the vertebrae.
- **Herniated disks.** Age also affects the exterior of your spinal disks. Cracks often appear, leading to bulging (herniated) disks — which sometimes can press on the spinal cord and nerve roots.
- **Bone spurs.** Disk degeneration often results in the spine producing extra amounts of bone in a misguided effort to strengthen the spine. These bone spurs can sometimes pinch the spinal cord and nerve roots.
- **Stiff ligaments.** Ligaments are cords of tissue that connect bone to bone. Spinal ligaments can stiffen with age, making your neck less flexible.

Risk factors for cervical spondylosis include:

- **Age.** Cervical spondylosis is a normal part of aging.
- **Occupation.** Jobs that involve repetitive neck motions, awkward positioning or a lot of overhead work put extra stress on your neck.
- **Neck injuries.** Previous neck injuries appear to increase the risk of cervical spondylosis.
- **Genetic factors.** Some individuals in certain families will experience more of these changes over time, while others will not.
- **Smoking.** Smoking has been linked to increased neck pain.

If your spinal cord or nerve roots become severely compressed as a result of cervical spondylosis, the damage can be permanent.

You might be referred to a physical therapist or a doctor specializing in spine disorders (orthopedist).

What you can do

- **Write down your symptoms,** and when they began.
- **Write down your key medical information,** including other conditions.
- **Write down key personal information,** including any major changes or stressors in your life.
- **Make a list of all your medications,** vitamins or supplements.
- **Find out if anyone in your family** has had similar problems.
- **Ask a relative or friend to accompany you,** to help you remember what the doctor says.
- **Write down questions to ask** your doctor.

Questions to ask your doctor

- What's the most likely cause of my symptoms?
- What kinds of tests do I need?
- What treatments are available?
- I have other health conditions. How can I best manage them together?

In addition to the questions that you've prepared to ask your doctor, don't hesitate to ask other questions.

What to expect from your doctor

Your doctor is likely to ask you a number of questions. Being ready to answer them may make time to go over points you want to discuss in-depth. You might be asked:

- Where exactly does your neck hurt?
- Have you had previous episodes of similar pain that eventually went away?
- Have you experienced any changes in your bladder or bowel control?
- Have you experienced tingling or weakness in your arms, hands, legs or feet?
- Do you have difficulty walking?
- What self-care measures have you tried, and have any of them helped?
- What are your occupation, hobbies and recreational activities?
- Have you ever had whiplash or another neck injury?

Your doctor will likely start with a physical exam that includes:

- Checking the range of motion in your neck
- Testing your reflexes and muscle strength to find out if there's pressure on your spinal nerves or spinal cord
- Watching you walk to see if spinal compression is affecting your gait

Imaging tests

Imaging tests can provide detailed information to guide diagnosis and treatment. Your doctor might recommend:

- **Neck X-ray.** An X-ray can show abnormalities, such as bone spurs, that indicate cervical spondylosis. Neck X-ray can also rule out rare and more serious causes for neck pain and stiffness, such as tumors, infections or fractures.
- **CT scan.** CT scan can provide more detailed imaging, particularly of bones.
- **MRI.** MRI can help pinpoint areas where nerves might be pinched.

- **Myelography.** A tracer dye is injected into the spinal canal to provide more detailed X-ray or CT imaging.

Nerve function tests

Your doctor might recommend tests to determine if nerve signals are traveling properly to your muscles. Nerve function tests include:

- **Electromyography (EMG).** This test measures the electrical activity in your nerves as they transmit messages to your muscles when the muscles are contracting and when they're at rest.
- **Nerve conduction study.** Electrodes are attached to your skin above the nerve to be studied. A small shock is passed through the nerve to measure the strength and speed of nerve signals.

Treatment for cervical spondylosis depends on the severity of your signs and symptoms. The goal of treatment is to relieve pain, help you maintain your usual activities as much as possible, and prevent permanent injury to the spinal cord and nerves.

Medications

If over-the-counter pain relievers don't help, your doctor might prescribe:

- **Nonsteroidal anti-inflammatory drugs.** Prescription-strength ibuprofen (Ibuprofen) or naproxen sodium (Anaprox, Anaprox DS) might be needed to relieve pain and inflammation.
- **Corticosteroids.** Oral medications, such as prednisone, might help ease pain. If your pain is severe, your doctor might suggest steroid injections.
- **Muscle relaxants.** Certain drugs, such as cyclobenzaprine (Amrix, Fexmid) and methocarbamol (Robaxin), can help relieve muscle spasms in the neck.
- **Anti-seizure medications.** Some types of epilepsy medications, such as gabapentin (Neurontin) and pregabalin (Lyrica), can dull the pain of damaged nerves.
- **Antidepressants.** Certain antidepressant medications have been found to help ease neck pain from cervical spondylosis.
- **Prescription pain relievers.** Your doctor might prescribe oxycodone (Percocet, Roxicet).

Therapy

A physical therapist can teach you exercises to help stretch and strengthen the muscles in your neck and shoulders. Some people with cervical spondylosis benefit from the use

of traction, which can help provide more space within the spine if nerve roots are being pinched.

Acupuncture

Your doctor might recommend trying acupuncture to reduce your pain. Acupuncture is best provided by a licensed acupuncture practitioner.

Surgery

If conservative treatment fails or if your neurological signs and symptoms — such as weakness in your arms or legs — worsen, you might need surgery to create more room for your spinal cord and nerve roots.

The surgery might involve:

- Removing a herniated disk or bone spurs
- Removing part of a vertebra
- Fusing a segment of the neck using bone graft and hardware

Mild cervical spondylosis might respond to:

- **Regular exercise.** Maintaining activity will help speed recovery, even if you have to temporarily modify some of your exercises because of neck pain. People who walk daily are less likely to experience neck and low back pain.
- **Over-the-counter pain relievers.** Ibuprofen (Advil, Motrin IB, others), naproxen sodium (Aleve) or acetaminophen (Tylenol, others) is often enough to control the pain associated with cervical spondylosis.
- **Heat or ice.** Applying heat or ice to your neck can ease sore neck muscles.
- **Soft neck brace.** The brace allows your neck muscles to rest. However, a neck brace should be worn for only short periods of time because it can eventually weaken neck muscles.

References

1. Shen FH, et al. Cervical spondylotic myelopathy. In: Textbook of the Cervical Spine. Philadelphia, Pa.: Saunders Elsevier; 2015. <https://www.clinicalkey.com>. Accessed March 5, 2015.
2. Levin K. Cervical spondylitic myelopathy. <http://www.uptodate.com/home>. Accessed March 5, 2015.
3. Isaac Z. Evaluation of the patient with neck pain and cervical spine disorders. <http://www.uptodate.com/home>. Accessed March 5, 2015.
4. Robinson J. Clinical features and diagnosis of cervical radiculopathy. <http://www.uptodate.com/home>. Accessed March 5, 2015.

5. Cervical spondylosis (arthritis of the neck). American Academy of Orthopaedic Surgeons. <http://orthoinfo.aaos.org/topic.cfm?topic=A00369>. Accessed March 5, 2015.
6. AskMayoExpert. What is cervical spondylitic myelopathy? Rochester, Minn.: Mayo Foundation for Medical Education and Research; 2014.
7. AskMayoExpert. What causes cervical spine pain? Rochester, Minn.: Mayo Foundation for Medical Education and Research; 2014.
8. Robinson J. Treatment of cervical radiculopathy. <http://www.uptodate.com/home>. Accessed March 5, 2015.
9. Shelerud RA (expert opinion). Mayo Clinic, Rochester, Minn. March 24, 2015.
10. Sitthipornvorakul E, et al. The effect of daily walking steps on preventing neck and low back pain in sedentary workers: A 1-year prospective cohort study. *European Spine Journal*. 2015;24:417.

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