

Healthy Living

Patient Information from the American Chiropractic Association

Neck Pain: Prevention and Conservative Care



The cervical spine is made up of seven small vertebrae at the back of the neck between the top of the spine and the base of the skull. We can move our heads in nearly every direction because of the flexibility of the cervical spine. That flexibility, however, makes the neck more susceptible to pain and injury.

Athletes often suffer from acute neck sprains or strains that can cause bruising, swelling, and severe pain. First aid for such injuries is typically RICE (rest, ice, compression, and elevation). After the swelling goes down, conservative chiropractic care can help these injuries heal.

How do many non-sports-related neck injuries happen?

DAILY LIFE: Poor posture, obesity, and weak abdominal muscles often disrupt spinal balance, causing the neck to bend forward to compensate. Holding the head forward while watching TV, reading, or working can cause neck pain, too. The neck is designed to hold a 12 lb. head erect. When the head is allowed to roll forward, to one side, or backwards for too long, neck muscles and ligaments get stressed and neck pain that can extend into the upper back and arms is often the result.

Sometimes a pillow is the culprit. It may be too high, too flat, or it may not support the head well. Sleeping

on the stomach with the head bent or twisted can also “kink” the neck.

Many people also develop neck pain by resting the chin or forehead on an upright fist or arm while reading or watching TV.

THE OFFICE: A fundamental understanding of workplace ergonomics is helpful when it comes to neck pain. To avoid stressing the neck, have your eyes level with the upper third of the computer monitor.

Neck pain can result from reading for long periods from materials placed to the right or left of the screen while typing. Shift materials from left to right to left, etc., at least every 10 to 15 minutes so as not to strain the neck muscles for too long. Persistent movements to one side of the body or keeping the neck in constant rotation irritates joints and soft tissues. Poor sitting habits can also cause neck pain, especially slumping.

ACCIDENTS: Whiplash is the sudden forced movement of the head or neck in any direction and the resulting “rebound” in the opposite direction. That type of sudden motion causes muscles to tighten up. Pain and stiffness are often the result. Severe whiplash can also create injury to the intervertebral joints, discs, ligaments, muscles, and nerve roots.

AGING: Degenerative disorders affect the spine.

- Osteoarthritis causes progressive cartilage deterioration. The body may form painful bone spurs.
- Spinal stenosis narrows small nerve passageways in the vertebrae, compressing and trapping nerve roots. Stenosis may cause neck, shoulder, and arm pain and numbness.
- Degenerative disc disease can reduce the elasticity and height of intervertebral discs throughout the spine, resulting in pain.

Falls and Blows to the Head

Trips and falls can injure the head and neck. If you do fall, use your arms and hands to keep your head from striking hard surfaces.

Chiropractic Care of Neck Pain

For neck pain, your doctor of chiropractic (DC) may order diagnostic tests. An x-ray can show narrowed disc space, fractures, bone spurs, or arthritis. A computerized axial tomography scan (a CT or CAT scan) or a magnetic resonance imaging test (an MRI) can show bulging discs and herniations.

DCs are conservative care doctors. They utilize a drug-free approach to treatment. If your chiropractor diagnoses a condition outside of this conservative scope, such as a neck fracture or an indication of an organic disease, he or she will refer you to the appropriate medical physician or specialist.

Neck Adjustments

A neck adjustment (also known as a cervical manipulation) is a precise procedure applied to the joints of the neck, usually by hand. A neck adjustment works to improve the mobility of the spine and to restore range of motion. It can also increase movement of the adjoining muscles. Patients typically notice an improved ability to turn and tilt the head, and a reduction of pain, soreness, and stiffness.

In addition to manipulation, your treatment plan may include mobilization, massage, or rehabilitative exercises.

Train Your Neck

Ask your doctor of chiropractic for a simple exercise or two to strengthen your neck. You'll be surprised to see how helpful a little exercise can be when it comes to avoiding or reducing future neck pain.

References

1. Vernon H, Humphreys K, Hagino C. Chronic mechanical neck pain in adults treated by manual therapy: a systematic review of change scores in randomized clinical trials. *J Manip Physiol Ther.* 2007 March;30(3):215-227.
2. Korthals-deBos I, et al. Cost effectiveness of physiotherapy, manual therapy and general practitioner care for neck pain: economic evaluation alongside a randomized controlled trial. *British Medical Journal* 2003;326:911.
3. Bronfort G, Evans R, et al. Spinal manipulation, medication, or home exercise with advice for acute and subacute neck pain: a randomized trial. *Annals of Internal Medicine* 2012;156 (1):1-10. <http://annals.org/article.aspx?articleid=1033256>
4. Cassidy, et al. *Risk of vertebrasilar stroke and chiropractic care.* *Spine (Phila PA 1976);*2008 Feb 15;33(44 Suppl):S176-83.

Research Supporting Chiropractic for Neck Pain

- A recent scientific literature review found evidence that chronic neck pain patients enrolled in clinical trials reported significant improvement following chiropractic spinal manipulation.¹
- A randomized, controlled trial determined that manual therapy proved to be the most effective treatment for neck pain, compared to physiotherapy and general practitioner care.²
- A study in the *Annals of Internal Medicine* found that patients treated with spinal manipulation or exercise had significantly greater pain relief of pain up to one year after treatment ended than patients given only medications.³
- Another study looked at whether chiropractic neck manipulation causes vertebral artery dissection (VAD) stroke. It found that although patients with headache and neck pain may visit a chiropractor, those who later developed a VAD stroke were just as likely to have visited their primary care physician (PCP). Because MDs do not manipulate necks, the authors stated: "The increased risks of VBA stroke associated with chiropractic and PCP visits is likely due to patients with headache and neck pain from VBA dissection seeking care before their stroke. We found no evidence of excess risk of VBA stroke-associated with chiropractic care compared to primary care."⁴



For more information on prevention and wellness, or to find a doctor of chiropractic near you, visit ACA's website at www.acatoday.org/patients.

This patient information page is a public service of the American Chiropractic Association. The information and recommendations appearing on this page are appropriate in most instances, but they are not a substitute for a diagnosis by a specialist. For specific information concerning your health condition, consult your doctor of chiropractic. This page may be reproduced noncommercially by doctors of chiropractic and other healthcare professionals to educate patients. Any other reproduction is subject to ACA approval.