

What Causes Neck Pain?

By Richard Jackson, MD

Neck pain is a common problem, affecting 40 to 75% of adults at some time during their life. Neck pain is more common in females than males. Oftentimes, neck pain is a self-limited or temporary condition responding favorably to simple treatments such as rest, over-the-counter medications and topical application of ice or moist heat.

TRAUMA-INDUCED NECK PAIN

Trauma, such as motor vehicular collision or sports injuries or occupational injuries, can cause neck pain. Major trauma can result in serious injuries such as fractured vertebra or herniated disc. These injuries can potentially cause paralysis and/or numbness. The most common traumatic neck injury is a whiplash injury. Whiplash is the result of a sudden extension/flexion movement of the neck, most commonly from a rear-end impact. This can occur in any type of vehicular injury, but also sports injuries or even a fall at home or work.

AGE-RELATED NECK PAIN

Age-related disc degeneration can result in arthritis of the neck, bone spurs in the neck, or herniated disc. Sometimes these will cause pressure on the spinal cord or nerve root with resultant pain or numbness or weakness radiating into the arm or hand.

OTHER CAUSES

Severe neck pain can result in spasms of the neck muscles with severe restricted range of motion of the neck. Rare causes of neck pain include infection in the spine, tumors of the spine, and rare congenital anomalies of the joints or malformation of the brain tissue such as Chiari malformation.

TREATMENT OF NECK PAIN

Treatment of the neck starts with avoidance of posture or activities that aggravate the pain. Medical treatment using over-the-counter medications such as aspirin, acetaminophen, ibu-



CAUSES OF NECK PAIN

- Muscle tension due to physical or psychological stress
- Poor Posture
- Occupational strain on neck muscles
- Ergonomic stress to the neck related to prolonged flexion of the neck, i.e., operators, seamstress jobs and microscopist jobs
- Computer work, especially on a laptop, can result in neck pain from prolonged looking down at the keyboard and/or monitor in a flexed neck position
- Direct traumas from contact sports can aggravate neck problems or whiplash
- Disc degeneration, herniation or bone spurs in the spine

profen or naproxen are often quite effective. Other home treatments could include topical heat or cold or massage.

Lifestyle changes include alteration of posture at work, such as changing the height of your chair at a desk to avoid prolonged flexion of the neck. Altering the height of a computer monitor or keyboard will avoid prolonged stress/tension on the neck muscles.

Avoiding cradling a telephone between the ear and the shoulder by using a telephone headset is oftentimes helpful for chronic muscle tension in the neck at work. Sleeping on you side or on you back with a rolled towel under the neck can avoid neck pain from sleeping in the prone position, which can cause chronic neck problems. If these lifestyle changes are ineffective, acupuncture or chiropractic adjustments and manipulation may be helpful.

WHEN SHOULD I SEE A DOCTOR?

If the above treatment methods do not work, evaluation by a physician can offer additional treatment options such as prescriptions for physical therapy including cervical traction, prescription strength pain medications or muscle relaxants, and a cervical collar. Imaging studies may be recommended. Sometimes injections in the structures of the neck with various steroid medications and analgesics are required.

If neck pain is resistant to the above modalities, surgery may be required. Before surgery is considered, diagnostic imaging testing with x-rays, MRI, CT scan or myelogram or EMG and nerve conduction tests are performed. Surgical treatment includes discectomy, disc replacement surgery, fusion of the spine or decompressive laminectomy to relieve pressure on the nerves or spinal cord in the neck.

Most neck pain conditions are temporary and respond favorably to non-operative treatment.

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