Spine Education - Neck Pain

Neck Pain

Your neck (cervical spine) is made up of vertebrae that extend from the skull to the upper torso. Cervical disks absorb shock between the bones. The bones, ligaments, and muscles of your neck support your head and allow for motion. Any abnormalities, inflammation, or injury can cause neck pain or stiffness.

Many people experience neck pain or stiffness in the neck occasionally. In many cases, it is due to poor posture, normal wear and tear, or overuse. Sometimes, neck pain is caused by injury from a fall, contact sports, or whiplash.

Most of the time, neck pain is not a serious condition and can be relieved within a few days. In some cases, neck pain can indicate serious injury or illness and require a doctor’s care. If neck pain continues more than a week, is severe, or is accompanied by other symptoms, seek medical attention immediately.

Causes of Neck Pain or Stiff Neck

Neck pain or stiffness can happen for a variety of reasons.

- **Muscle Tension and Strain**
  This is usually due to activities and behaviors such as:
  - poor posture
  - working at a desk for too long without changing position
  - sleeping with your neck in a bad position
  - jerking the neck during exercise

- **Injury**
  The neck is particularly vulnerable to injury, especially in falls, car accidents, and sports, where the muscles and ligaments of the neck are forced to move outside their normal range. If the neck is dislocated or fractured, the spinal cord may also be damaged. Neck injury caused by a sudden jerking of the head is commonly called “whiplash.”

- **Diseases and Conditions**
  - **Arthritis** causes pain, swelling of the joints, and bone spurs. When these occur in the neck area, neck pain can result.
  - **Osteoporosis** weakens bones and can result in small fractures.
  - **Fibromyalgia** is a condition that causes muscle pain throughout the body. As you age, the cervical disks can degenerate (spondylosis), narrowing the space between the vertebrae and adding stress to the joints. When a disk protrudes, it may add pressure to the spinal cord or nerve roots. This is called a **herniated cervical disk**, also known as a ruptured disk or slipped disk.
  - **Spinal stenosis** occurs when the spinal column narrows and causes pressure on the spinal cord. This can be due to long-term inflammation caused by arthritis or other reasons.

  Severe stenosis and/or ruptured discs can cause arm pain and/or spinal cord compression. Spinal cord compression can result in cervical myelopathy (numbness in the
hands that is there all of the time, clumsiness and loss of dexterity in the hands and later as symptoms progress you may experience weakness in the legs. Spinal cord compression is usually treated with surgery.

- **Meningitis** is an inflammation of the thin tissue that surrounds the brain and spinal cord. Stiff neck is usually accompanied by fever and severe headache. Meningitis can be deadly and is a medical emergency. If you have symptoms of meningitis, seek help immediately. In rare instances, neck stiffness or pain is caused by **congenital abnormalities**, in addition to infections, abscesses, tumors, or cancer of the spine.

**How to Ease Neck Pain at Home**

If you have minor neck pain or stiffness, take these simple steps to relieve it:

- Apply ice for the first few days of your neck hurting. After that, apply heat with a heating pad, hot compress, or hot showers.
- Take over-the-counter pain relievers such as ibuprofen or acetaminophen.
- Take a few days off from sports, activities that aggravate your symptoms, and heavy lifting. Resume normal activity slowly as symptoms ease.
- Exercise your neck every day. Slowly stretch your head in side-to-side and up-and-down motions.
- Use good posture.
- Avoid cradling the phone between your neck and shoulder.
- Change your position often. Do not stand or sit in one position for too long.
- Get a gentle neck massage.
- Use a special neck pillow for sleeping.
- Do not use a neck brace or collar without checking with your doctor’s approval. If not used properly, this can actually make the problem worse.

**When to Seek Medical Care**

If symptoms persist for more than a week, consult with your doctor. You should also see a doctor if you have:

- severe neck pain without apparent cause
- a lump in your neck
- fever
- headache
- swollen glands
- nausea and vomiting
- trouble swallowing or breathing
- weakness
- numbness and tingling
- pain that radiates down your arms or legs
- inability to move your arms or hands
- inability to touch your chin to your chest
- bladder or bowel dysfunction

If you've been in an accident or fall and your neck hurts, seek medical care immediately.

**How Neck Pain Is Treated**

Your doctor will perform a physical exam and take your complete medical history. Be prepared to provide specifics about your symptoms, prescription and over-the-counter medications and supplements, and recent injuries or accidents, even if they don't seem related.

Treatment for neck pain will depend on the diagnosis but the first line and most successful treatment for
neck pain is physical therapy. Your doctor may order tests such as X-Rays prior to physical therapy but often therapy is ordered prior to more extensive testing such as CT or MRI because most of the time physical therapy will improve painful symptoms.

Treatment for neck pain may also include:
- Chiropractic
- ice and heat therapy
- exercise and stretching
- traction
- muscle relaxants
- pain medication
- corticosteroid injections
- neck collar
- antibiotics (if infection is involved)
- hospital treatment (if a condition such as meningitis or heart attack is the cause)
- surgery is a last resort and is rarely successful in the treatment of neck pain. It is however used for other problems related to the cervical spine such as arm pain or spinal cord compression

Alternative therapies include acupuncture, massage, and transcutaneous electrical nerve stimulation (TENS). Make sure you are dealing with a licensed professional when using these methods.

Tests to aid in diagnosing neck pain if physical therapy or other conservative therapies do not help may include:
- blood tests
- X-rays
- computed tomography (CT) scan
- magnetic resonance imaging (MRI)
- electromyography (EMG – a test that checks the health of muscles and the nerves that control muscles)
- lumbar puncture (spinal tap)