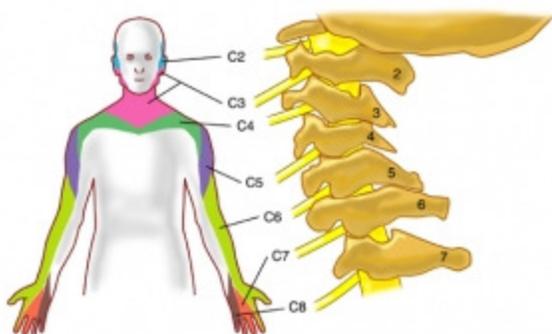


UNDERSTANDING A “PINCHED NERVE” IN THE NECK

By Dr. John A. Papa, DC, FCCP(C)

About two-thirds of people will experience neck pain at some point in their lives. Occasionally, neck pain can spread to involve other structures such as the upper back, shoulder, and arm regions. Pain in these regions is often dismissed simply as muscle pain. However, a “**pinched nerve**” originating from the neck can radiate pain to these nearby anatomical sites and be a significant source of discomfort.

The “cervical spine” is the medical name given to the region of the neck. Nerve roots originate from the cervical spine on each side. These nerves send off various branches that travel to distinct regions in the upper back and arms to supply strength to muscles and provide sensation/feeling. The term “**pinched nerve**” is often used to describe a mechanical and/or inflammatory irritation directly affecting any component of the nerve root(s) in the neck/cervical spine.



A “**pinched nerve**” in the neck can cause symptoms almost anywhere along the nerve pathway. This may result in neck symptoms only, and/or symptoms that radiate into the chest, upper back, shoulder, arm, hand and finger regions. The symptoms can vary widely and may include: a cramping or achy feeling, tightness, burning or a sharp electric shock sensation, numbness, tingling, and arm muscle weakness. The symptoms may start gradually and intensify over time. Activities such as movement of the neck or shoulder, prolonged sitting or laying down, lifting, and even coughing or sneezing may aggravate the symptoms.

Below is a brief summary of three common causes of a “**pinched nerve**” in the neck:

1. **Spinal disc herniation/bulge** – Spinal discs separate and cushion cervical vertebra. Repetitive and cumulative loads or a heavy single load has the potential to cause a disc bulge or herniation, thereby causing a mechanical and/or inflammatory irritation of the nerve root(s). This most commonly occurs in adults aged 20-50.
2. **Degeneration and Osteoarthritis** – The normal aging process causes cervical disc degeneration and osteoarthritis of the cervical joints. The consequence of these processes is that mechanical irritation from bony spurs on the vertebrae along with inflammation can cause irritation of the nerve root(s). This most commonly occurs in adults over 50.
3. **Cervical spinal stenosis** – This condition may cause “**pinched nerve**” symptoms due to narrowing of the spinal canal and/or nerve pathways, which puts pressure on the nerve root(s) or spinal cord. This most commonly occurs in adults over 60. It is usually secondary to degeneration and osteoarthritis.

Other causes of a “**pinched nerve**” in the neck include: direct irritation of nerve tissue by overlying muscles; direct trauma or injury to the nerve root(s); and mechanical changes in the neck associated with poor postural habits (i.e. head poking forward in the sitting position). Some common causes of symptoms that act like a “**pinched nerve**” in the neck include muscular trigger points, ligament sprains and arthritic joints from the neck, upper back, and shoulder regions.



Treatment for a “**pinched nerve**” in the neck will often be different depending on the underlying cause of the symptoms. Therefore, it is important to obtain an accurate diagnosis. A proper medical history, along with physical examination consisting of range of motion, strength, neurological and orthopaedic testing, along with diagnostic imaging (if necessary) should be performed to aid in the diagnosis. It is extremely important to rule out rare causes of “**pinched nerve**” symptoms such as spinal tumors, fractures and

infections. Disorders of the esophagus, trachea (windpipe), heart and thyroid can cause symptoms that overlap with those of a "**pinched nerve**" in the neck. These potential causes require appropriate medical referral when applicable.

There are natural and conservative treatment options available for those suffering from a "**pinched nerve**" in the neck. These may include: mechanical traction, spinal manipulation and mobilization, soft tissue techniques, acupuncture, ice/heat application, electrotherapy, activity modification, postural education, and rehabilitative exercise. A qualified health professional can determine the cause of your symptoms and prescribe appropriate therapy and rehabilitation strategies specifically for your circumstance. For more information, visit www.nhwc.ca.

This article is a basic summary for educational purposes only. It is not intended, and should not be considered, as a replacement for consultation, diagnosis or treatment by a duly licensed health practitioner.