

There are a variety of nerves that can be pinched in the human body, with all sorts of pain and problems that can be associated with this issue. Correct diagnosis is the key to developing an appropriate treatment plan. Nerve compression can lead to permanent nerve damage and symptoms of numbness, weakness and pain should be evaluated.

Spinal pinched nerves are a common medical problem. The spinal cord starts at the base of the brain and runs down the center of the spine. The nerves that come off the spinal cord are called the nerve roots, these exit between the bones in the spine called the vertebrae. Each spinal nerve runs in a specific pattern, the nerves that exit the neck go into the arms, the nerves in the mid back run around the ribs and abdomen. The nerves from

Pinched Nerves

By: Katherine Leppard, MD, PT

the lower or lumbar spine run into the buttocks and into the legs.

A pinched nerve in the neck is called a cervical radiculopathy. Typically a cervical radiculopathy causes pain in the neck or shoulder blade region, with pain and numbness radiating down into the arm, weakness can also occur. Sometimes, there is no neck pain but severe pain in the region of the shoulder blade or numbness and weakness in the arm, this can make accurate diagnosis more difficult. Nerves in the neck can be pinched by a number of conditions, such as a disc protrusion or a bone spur. Diagnosis is made by

physical examination, MRI and EMG (electromyography) testing.

Medical treatment for a cervical radiculopathy falls into several categories.

1. Do nothing, often mother nature will resolve the problem. Please seek medical attention prior to doing nothing, there are very real risks of nerve damage and weakness if a serious condition is ignored. The longer there is pressure on a nerve, the greater the risk of permanent nerve damage.

Surgery, the most extreme intervention, done when there is significant pathology such as spinal cord compression, instability or severe nerve compression.

Steroids to reduce the swelling of the nerve. This can be either steroids pills for a short period of time, or steroid epidural injections which are done into

Medical Rehabilitation Specialists

Katharine Leppard, MD, PT

13 Years Private Practice in Colorado Springs

Board Certified:

- Electrodiagnostic Medicine
- Neuromuscular Medicine
- Physical Medicine & Rehab



**Medical
Rehabilitation
Specialists**

Call for an appointment 719-575-1800

3470 Centennial Blvd, Suite 110, Colorado Springs, CO 80907
Accepting most insurances www.medical-rehab.com



HANDS-ON THERAPY WITH SOFT TISSUE WORK TO REDUCE THE MUSCLE SPASMS AND GENTLE EXERCISE TO IMPROVE RANGE OF MOTION. HIGH VELOCITY ADJUSTMENTS SHOULD BE AVOIDED IN THE PRESENCE OF A CERVICAL RADICULOPATHY, AS THESE CAN IRRITATE A PINCHED NERVE AND CAN MAKE A SMALL DISC RUPTURE LARGER.

the spine under x-ray. There are potential side effects and risks of both the medication and injections. Cervical epidural injections have the remote risk of a spinal cord injury.

Traction, which temporarily opens the nerve canals when on the machine, temporarily gets the pressure off the inflamed nerve and allowing natural healing to occur. Traction done through physical therapy is usually covered by insurance. If traction is helpful, there are home cervical traction units that allow patients to do traction several times a day at home, thus reducing the cost of treatment even further. Traction unfortunately does not make bone spurs disappear, it does not make disc protrusions smaller, nor can it rehydrate a dried degenerative disc.

Hands-on therapy with soft tissue work to reduce the muscle spasms and gentle exercise to improve range of motion. High velocity adjustments should be avoided in the presence of a cervical radiculopathy, as these can irritate a pinched nerve and can make a small disc rupture larger.

A lumbar radiculopathy is a pinched nerve in the lower lumbar spine. Often this is called sciatica. This can cause severe buttock or low back pain radiating into the leg, with potential numbness and weakness. Medical treatment for a pinched nerve in the lumbar low back is similar to that for a pinched nerve in the neck, with a few differences.

Steroid injections in the low back are much safer than in the neck. The spinal cord ends in the upper lumbar region, and injections below the cord are therefore much safer, and are much more commonly preformed.

Traction is unfortunately not as effective for the low back as the neck for a pinched nerve.

Surgery is done when there is severe pathology identified. In addition to the traditional surgical procedures, there is a new approach for spinal stenosis called the MILD (minimally invasive lumbar decompression) (please see Dr. Lippert's article from the Spring 2010 edition of *SENIOR Magazine*).

Hands-on therapy can help with muscle tightness, alignment and strengthening.

There are a variety of pinched nerves that can happen in the arms.

Numb hands are not normal, and should be evaluated. These include carpal tunnel syndrome, a pinch of the median nerve at the wrist. This typically causes numbness in the hand at night, and as it worsens, pain and numbness in the day with potential weakness. Cubital tunnel syndrome, a pinch of the ulnar nerve at the inner elbow, which causes numbness in the ring and little finger, and can lead to significant hand weakness.

Thoracic outlet syndrome is a rare nerve issue where the nerves in the arm pit can become trapped.

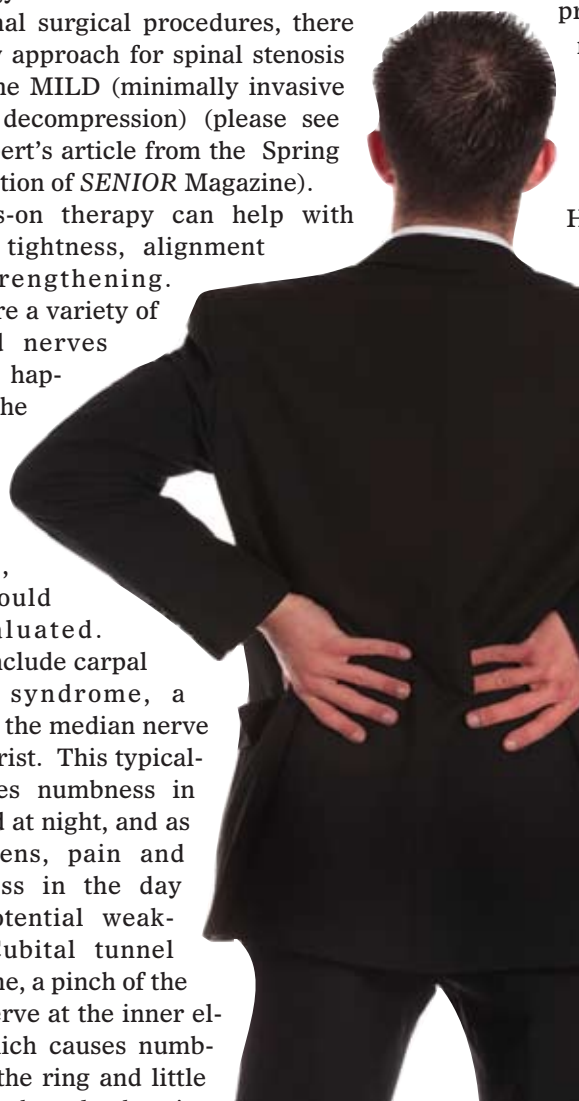
There are many patients who live with a level of constant neck or low back pain, if that person then develops arm or leg numbness and pain, it is easy to assume that the

problem must be originating from the spine.

In this situation, a MRI is often done of the spine, which often finds disc bulging.

However, disc bulges can be normal and do become much more common as we age. This is a common diagnostic dilemma, and an EMG test to fully evaluate the nerves is critical at that time to give an accurate diagnosis and treatment plan.

Proper diagnosis is the first step in appropriate treatment. Pinched nerves can be very painful and do have the risk of permanent nerve damage if ignored. Please seek evaluation if you are experiencing pain, numbness or weakness.



Dr. Leppard is with Medical Rehabilitation Specialists and may be reached at 719-575-1800.