Conservative Care for Cervical Spine Disorders

You have probably seen your doctor because of either neck or arm pain, or both. Many conditions that cause these types of symptoms can be treated without surgery. In order for your physician to treat your symptoms, he or she will discuss the nature of your problem and perform a physical exam. Certain tests may be needed to confirm the diagnosis. There are many common treatment options that can be considered depending on your specific diagnosis.

Diagnostic Testing

The most common and basic diagnostic test is an x-ray of the neck or cervical spine. This is a quick, non-invasive procedure that can be performed in an office or hospital setting. X-rays use a small amount of radiation to produce an image of the bones, and to some degree, the soft tissues structures of the neck. This provides structural diagnostic information. The x-rays are performed at a variety of angles around the neck to gain as much diagnostic information as possible. These x-rays can help evaluate the alignment of your cervical spine, diagnosis fractures, bone spurs (arthritis), and some problems associated with the spinal discs.

In many cases, regular x-rays are the only diagnostic test that your physician will require. However, more detailed structural information may be needed to devise a treatment plan. This information can be obtained from either Magnetic Resonance Imaging (MRI) or Computed Axial Tomography (CT or CAT scans). In most patients, the MRI is the preferred advanced imaging study. The actual discs, nerves, spinal cord, and bones can be visualized. Patients with pacemakers, metal filings in their eyes (i.e. machinists), aneurysm clips, and certain other metallic objects in their body may not be able to have an MRI. Patients with artificial joint replacements and devices to fix fractures of other bones in the body generally can undergo MRI's. In patients who cannot undergo MRI's, or in some cases where additional information may be needed, CT's with or without dye may be necessary.

Other common diagnostic tests include those tests that provide information as to the function of the spinal cord and nerves. These include Electromyography/Nerve Conduction Velocities (EMG/NCVs) and Somatosenory Evoke Potentials (SSEPs). Their use is typically required on a case-by-case basis, and they are not needed as often as the structural diagnostic tests.

Therapeutic Options

Conservative care can be very effective in treating most symptoms related to disorders of the neck and cervical spine. Flare-ups of mechanical neck pain from muscle strains,as well as arm pain from a herniated disc causing a "pinched nerve" typically respond very successfully to nonoperative care. The most basic and simplest is a brief period of activity modification or rest. This can involve taking a break from routine daily activities or work to allow an acute or recent problem to resolve. On occasion, a cervical collar can be helpful for a short period of time to help the neck muscles relax or to act as a reminder to minimize neck motion or activity. Medications such as anti-inflammatories, pain relievers, steroids, muscle relaxants or narcotic pain relievers may be used.

Physical therapy (PT) is commonly used in the conservative care of cervical spine disorders. PT includes pain relieving modalities such as ultrasound, heat, electric stimulation and massage. In order for PT to be effective in the long term, it should involve not only these modalities but also stretching, therapeutic strengthening exercises for the neck and surrounding muscles, postural

retraining, education and progression to a home exercise program. Traction may also be used if approved by your physician.

Chiropractic care or adjustments to the neck can be successful in many cases. You should discuss this with your doctor if you choose this method of treatment, as certain conditions should not be manipulated. You should maintain a treatment strategy that is consistent with your physician's experience.

Injection procedures can be used to help relieve painful symptoms arising from disorders of the neck and cervical spine. These fall into two categories: those done into muscular regions and those around neurologic structures. Muscular injections, or trigger point injections, can be use to relieve painful spasm and tightness in the neck muscles. They typically involve the injection of an anesthetic medication similar to Novocain, and an anti-inflammatory steroid. Injections around the neurologic structures include epidural injections and nerve root blocks. Epidural injections involve placing medication around the region and tissue the covers the spinal cord. Nerve root blocks involve placing medication around the spinal nerves after they have split off the spinal cord and are just exiting the spinal column. Medication that is injected around neurologic structures includes an anti-inflammatory steroid and frequently a local anesthetic. Physicians who perform epidural or nerve root blocks may require x-ray guidance to perform these procedures. Injections are not for everybody: usefulness and long-term benefit need to be evaluated on a case-by-case basis and are also dependent on your actual diagnosis.

Summary

Conservative care for cervical spine problems can be very effective in the vast majority of patients. The exact mode of treatment is dependent on your actual symptoms, history of prior treatment, structural problems, and diagnosis. Many patients can also benefit from combining one or more treatment options. Your particular treatment strategy will arise from a combination of these principles, your specific needs, and your physician's experience and assessment of your particular condition.

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