

Cervical Radiculopathy

Condition: Cervical radiculopathy is a medical condition where there can be symptoms of pain, weakness, and/or numbness as a result of a pinched or irritated nerve in the neck. The term “cervical” refers to the neck. Much like a “pinched nerve” in the back can cause symptoms in the leg (known as “lumbar radiculopathy”), cervical radiculopathy will cause symptoms in one or both arms.

Background: Nerve pain and loss of function are often be caused by a cervical disc herniation and can also be caused by arthritic changes crowding the space for a nerve. Trauma or swelling can contribute to symptoms. Cervical radiculopathy can less commonly be caused by tumors, infection, or changes in blood flow.

Risk Factors: Men are affected slightly more often than women. Risk factors for this condition include heavy manual labor requiring lifting, smoking, driving, operating vibrating equipment, neck trauma (from sports or a motor vehicle accident), and previous spinal nerve injury.

History and Symptoms: Onset can be either immediate (as usually observed in younger patients with an injury) or symptoms can develop over time. A slower, gradual onset may be seen in older patients due to changes in the spine from aging causing nerve irritation. Symptoms can include pain radiating from the neck into the shoulder blade or down the arm, numbness in the arm (that can radiate into the hand) or weakness in arm muscles. Some patients may have all of these but others may only have pain. There may also be associated neck pain and limited range of motion. A disability questionnaire can be useful to evaluate the impact of the pain on everyday activities, such as personal care, work, driving, and sleeping.

Physical Exam: On examination, patients will often have pain radiating down the arm that matches up with one or more of the nerves coming from the neck. There may be numbness in parts of the arm or weakness in certain muscles. Patients may have trouble moving their neck if it causes pain down the arm and at times placing their hand on top of their head can relieve the pain. Some patients will have reflexes that are different in their affected arm compared to the other side.

Diagnostic Process: A physiatrist is a physical medicine and rehabilitation (PM&R) physician who is an expert in muscle and nerve problems. They will obtain a medical history and perform a physical examination. This is necessary to identify the precise location of the pain and to try to identify factors that relieve the pain or make the pain worse. A thorough neurological exam to look for numbness or weakness is part of proper treatment. X-rays or more advanced tests like an MRI or CT scan may be needed to look at the neck and the nerves. Many PM&R physicians can also perform nerve tests (actually called nerve conduction studies with electromyography) to better evaluate the function of the nerves and to help rule-out other neurological problems.

Rehab Management: Many times this condition can be treated without surgery. Up to 90% of patients may improve with rehabilitation. Treatment goals are to relieve pain, improve neurological function, and prevent recurrence. A PM&R physician can prescribe medications for pain or anti-inflammatories such as NSAIDs or steroids. They may recommend formal physical therapy to work on pain control, range of motion and strengthening. Rehabilitation also involves modification of activities to maintain function and prevent a recurrence. Some physiatrists can perform spine injections to treat pain. If symptoms are not improving or at times when there is severe weakness they may refer a patient to see a spine surgeon.

Other Resources for Patients and Families: A PM&R physician treating this condition will often work with other healthcare professionals such as a physical or occupational therapist. They may refer patients to a spine surgeon if needed. Some patients with ongoing symptoms may benefit from biofeedback or relaxation techniques. There may also be a role for complementary medicine.

Frequently Asked Questions

What is PM&R?

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a primary medical specialty that aims to enhance and restore functional ability and improve quality of life to those with injuries, physical impairments or disabilities affecting the brain, spinal cord, nerves, bones, joints, ligaments, muscles and tendons. PM&R physicians, known as physiatrists, evaluate and treat the whole body, maximize patients' independence in their daily life and are experts in designing comprehensive, patient-centered treatment plans to empower patients to achieve their goals. By taking the whole body into account, they can accurately pin-point problems, decrease pain, assist in recovery from devastating injuries and maximize overall outcomes and performance with non-surgical and peri-surgical options. To learn more, visit www.aapmr.org/aboutpmr.

What makes PM&R physicians unique?

PM&R physicians' training focuses not just on treating medical conditions, but on enhancing the patient's performance and quality of life in the context of those medical conditions. They focus not only on one part of the body, but instead on the development of a comprehensive program for putting the pieces of a person's life back together – medically, socially, emotionally and vocationally – after injury or disease. PM&R physicians make and manage medical diagnoses, design a treatment plan and prescribe the therapies that physical therapists or other allied therapists perform or that are carried out by the patients themselves. By providing an appropriate treatment plan, PM&R physicians help patients stay as active as possible at any age. Their broad medical expertise allows them to treat disabling conditions throughout a person's lifetime.

Why see a PM&R physician?

A PM&R physician will thoroughly assess your condition, needs, and expectations and rule out any serious medical illnesses to develop a treatment plan. By understanding your condition and goals, you and your PM&R physician can develop a treatment plan suited to your unique needs.

How do I find a PM&R physician near me?

Visit www.aapmr.org/findapmrphysician or contact your primary care physician for a referral.