

A resource on Physical Medicine and Rehabilitation (PM&R) topics developed by the American Academy of Physical Medicine and Rehabilitation (AAPM&R)

Cervical Spondylotic Myelopathy

Condition: Cervical spondylotic myelopathy (CSM) is a condition where the spinal cord is damaged or pinched, either due to an injury, abnormal movements, or as a part of aging.

Background: In the U.S., CSM is the most common cause of spinal cord dysfunction in people over 55. As a person ages, the bones and cartilage of the backbone and neck begin to deteriorate (develop arthritis). For instance, spinal disks can develop cracks or lose their ability to cushion the vertebrae. This deterioration can cause damage to the spinal cord.

Risk Factors: Although the primary risk factor is aging, others who are at greater risk for CSM are people who have had neck injuries previously, as well as smokers and people with jobs that require them to use their neck repetitively or awkwardly. Men are also at greater risk.

History and Symptoms: Loss of balance is usually the first symptom a patient notices. Examples of other symptoms are arm and leg spasms, pain in the arms and legs, numbness, weakness and less dexterity in the hands and legs. Symptoms that require urgent assessment include sudden loss of the ability to walk, or loss of bowel and bladder control.

Physical Exam: A physical medicine and rehabilitation (PM&R) physician, also known as a physiatrist, will likely ask the patient to move his or her neck into various positions, have the patient walk and test his or her muscle strength, sensation and reflexes.

Diagnostic Process: To accurately diagnose CSM, a PM&R physician may order an MRI or CT scan, or perform an electromyogram (EMG), a test to check the function of the muscles and nerves.

Rehab Management: Rehabilitation depends on the extent of the damage and the patient's symptoms. For example, patients may benefit from physical therapy; in addition, others may need occupational therapy to improve their hand function. Fall prevention is very important for CSM patients; they should be advised to use assistive devices such as canes or walkers as needed, determined by a PM&R physicians. PM&R physicians are uniquely qualified to manage the pain, muscle spasms, and functional implications of this disorder.

Other Resources for Patients and Families: The NIH has additional resources that can help patients and families at https://www.ncbi.nlm.nih.gov/books/NBK482312/.



A resource on Physical Medicine and Rehabilitation (PM&R) topics developed by the American Academy of Physical Medicine and Rehabilitation (AAPM&R)

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.