

## Cerebrovascular Disorders

**Condition:** Cerebrovascular disorder refers to a condition that temporarily or permanently limits or blocks blood flow in the brain.

**Background:** There are different ways blood flow may be restricted or blocked: clots may form (thrombosis); the vessels may narrow (stenosis); there can be a blockage (embolism); or a blood vessel may burst and cause a brain bleed (hemorrhage). Stroke is a type of cerebrovascular disorder, and also the leading cause of disability in the U.S.

**Risk Factors:** Can be divided in two groups: modifiable – ones we can control and non-modifiable – ones we cannot control. Modifiable ones are high blood pressure, diabetes, atrial fibrillation, high cholesterol, obesity, smoking and substance abuse. Non-modifiable ones are personal or family history of stroke, older age, gender and race. For example, men also have a greater risk of stroke, as do African-Americans.

**History and Symptoms:** Symptoms of a stroke include abnormal or slurred speech; dizziness and nausea; severe headache; blurry or double vision; confusion; numbness, weakness on one side—in the face (facial droop), an arm or leg

**Physical Exam:** The physician will look for the symptoms described above. Additionally, he or she may also conduct other examinations, such as checking a patient's pulse in several different places to determine if there are any areas with blood flow problems.

**Diagnostic Process:** There are a number of tests a doctor can order to help diagnosis a cerebrovascular disorder. One is a cerebral angiography. This is a test that takes images of the blood flowing through the arteries in the neck and brain. Imaging tests, such as MRIs or CT scans will likely be ordered.

**Rehab Management:** The goal of rehabilitation is to help patients relearn and practice skills that may have been lost when the brain was damaged due to limited blood flow, or to learn new ways to perform tasks. A physical medicine and rehabilitation (PM&R) physician leads a comprehensive rehabilitation team that usually includes a physical, occupational and speech therapist. She or he can help the stroke patients getting back to working and driving, getting the right equipment for home and treating complications associated with stroke such as post-stroke pain and spasticity.

**Other Resources for Patients and Families:** The [American Stroke Association](http://www.americanstroke.org) offers many resources that can help patients and families, including an online support network.

## 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](http://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](http://www.aapmr.org/findapmrphysician) or contact your primary care physician for a referral.