

Seizures and Epilepsy

Condition: A seizure is a sudden burst of electrical activity in the brain. Epilepsy is when there are repeated seizures.

Background: There are many different types of seizures. Some affect the whole brain (generalized) but others only affect a part of the brain (partial or focal). During a generalized seizure, a person's muscles can stiffen, jerk, or twitch for some time, followed by confusion or sleepiness. Partial seizures take many different forms. The person can experience staring spells, changes in behavior or speech, or twitches in the face or limbs. About 5% of people have a seizure at some time in their life, but only about 1 in every 250 people have epilepsy.

Risk Factors: Seizures can be caused by many things such as traumatic brain injury, stroke, a brain tumor, infection, fever, or drug reactions. Triggers include flickering lights or lack of sleep. Children and older adults are most likely to have seizures. Epilepsy is more common in men than women.

History and Symptoms: After a seizure, you should see your doctor right away. They will ask questions about the event, including what happened around the time of the seizure. They will also ask about your medical history, medications, drug or alcohol use, and about any medical problems that run in your family. Your answers will help the doctor figure out what type of seizure you had, and what may have caused the seizure to happen.

Physical Exam: Your doctor will try to find out what caused the seizure by looking for signs of infection or other diseases of the brain. Tests of eye and face movements, strength, coordination, thinking, and speech will show what parts of the brain could be affected.

Diagnostic Process: Your doctor may order special tests to determine the presence and cause of seizures. An electroencephalogram (EEG) is used to measure electrical activity in different parts of the brain through sensors attached to the scalp. Magnetic Resonance Imaging (MRI) or computerized tomography (CT) studies provide detailed pictures of the brain that can help to reveal the cause of seizures. Blood tests and tests of the spinal fluid may also help in finding the cause of seizures.

Rehab Management: A physical medicine and rehabilitation (PM&R) physician is a specialist who focuses on the treatment and recovery of neurologic disorders like seizures and epilepsy. If you are diagnosed with seizures or epilepsy, you may need medication to prevent the seizures from happening again. For some people with epilepsy, medication is not enough and they need surgery to keep seizures from happening. Other treatments may also be needed, because people with seizures or epilepsy often have other conditions affecting their mood, thinking skills, and quality of life. A PM&R physician will review all of these things with you and can get you special equipment and therapies to improve your recovery and independence.

Other Resources for Patients and Families: Counseling and education can help patients, friends, and family cope with lifestyle changes needed after a seizure. Ask your PM&R physician about

counselling services in your area. The Epilepsy Foundation also has state and local chapters that provide these services for free or reduced cost in your area.

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.