Complex Regional Pain Syndrome

**Condition:** Complex regional pain syndrome (CRPS) is a chronic and disabling pain disorder that usually follows an injury to the arms or legs, such as a sprain, crush injury, broken bone or surgery. Pain usually continues after the expected healing time of the injury and can frequently be out of proportion to the expected pain level and outcome. CRPS has previously been known by many names including Reflex Sympathetic Dystrophy (RSD) and Causalgia.

**Background:** CRPS is rare, with only 26 cases in every 100,000 people who have an injury. Often, it can develop after an injury such as a bone fracture, sprain, or surgery. Other times, the cause is not clear and can range from an innocuous paper cut to a possible nerve injury.

**Risk Factors:** Women are more likely than men to have CRPS. Most often patients are in their 50s and 60s. Rarely, CRPS follows a stroke or heart attack. Usually CRPS begins about six weeks after an injury. In addition to pain and increased sensitivity, patients may have changes in skin color and temperature, swelling, changes of the skin and nails, and weakness. The pain may spread and get worse over time. It can also lead to inactivity that can cause other problems such as muscle stiffness or wasting.

**Physical Exam:** The doctor will look for signs of CRPS (known as the Budapest criteria). Evaluation may include testing your reactions to a pin prick or soft touch with a cotton swab. Other signs include changes in skin color and temperature, hair growth, and changes in the color and texture of the nails. The doctor will also want to see how well you can move your arms and legs.

**Diagnostic Process:** There are no specific blood or imaging tests that can diagnose CRPS, but these and other tests (such as x-ray or MRI imaging) may be performed to rule out other conditions. Nerve blocks, where drugs are injected near certain nerves, may be used to identify where the pain is coming from.

**Rehab Management:** Improving function is the main goal of treatment. Early identification of CRPS has been linked with improved outcomes and quality of life. A physical medicine and rehabilitation (PM&R) physician focuses on improved function for each patient. A PM&R physician will direct the multidisciplinary treatment strategies including medications, therapies such as physical, occupational, recreational, vocational, and cognitive-behavioral therapy, and pain interventions such as nerve blocks. Therapies may include graded motor imagery or mirror visual feedback. Neurromodulation with spinal cord stimulation can also be utilized to improve pain control and quality of life.

**Other Resources for Patients and Families:** CRPS can be very frustrating for patients, so family support is extremely important. Lifestyle changes may also be needed to help the patient take care of himself.
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.