

## Phantom Pain

**Condition:** Phantom pain is the feeling of pain in an organ or limb that is not physically present.

**Background:** Phantom pain occurs exclusively after limb amputation or after removal of organs, such as breast, eye, penis, or tongue. Approximately 60-80% of patients experience phantom pain within the first week after amputation, and this pain improves over time. Originally, phantom pain was thought to be psychological, but now doctors know that this pain originates from the spine and brain.

**Risk Factors:** Phantom pain is more common when pain was present in the missing limb before amputation. There is a greater incidence in patients with shorter stumps, lower leg amputations, and amputation of both legs. Children and those missing limbs at birth experience phantom pain less frequently.

**History and Symptoms:** Phantom pain generally occurs in the more distant parts of the missing limb, including the wrist, fingers, ankles, feet, or toes. The pain is described as intermittent burning, stabbing, prickling, shooting, or electrical. The reasons for amputation and the amount of pain that was present before and after the surgery should be considered.

**Physical Exam:** The physical exam will focus on the range of motion and measurements of the residual limb. Sensation, movement, and blood flow should also be assessed in the extremities on both sides of the body. If a prosthetic limb is used, the physical exam will evaluate this as well. Other potential sources of pain, including wounds, neuromas, or nerve problems, will be examined.

**Diagnostic Process:** Blood samples can be analyzed for signs of infection. X-rays of the limb are useful to evaluate the bony elements in the extremity. Tests of blood flow and nerve function in the remaining limb may be conducted. Ultrasound can be used to look for painful nerve endings and may be performed in the office of a physical medicine and rehabilitation (PM&R) physician.

**Rehab Management:** Physical therapy is an important part of phantom pain management. Also important are proper stump care and prosthetic limb fit which can be coordinated between a PM&R physician and the person who makes the prosthetic limb. PM&R physicians can also prescribe medications to help the pain including antidepressants, seizure medications, over the counter pain medications and prescriptions pain medications. Massage, movement, acupuncture and transcutaneous electrical nerve stimulation (TENS) may also be helpful. Other parts of treatment can include mirror box imagery treatment, compression, desensitization techniques, biofeedback, coping strategies, and skin care. Psychological support may also be necessary.

**Other Resources for Patients and Families:** PM&R physicians are experts on prosthetic planning and prescribing and can provide patients and families counsel on the nature and course of the pain. They can also assist with education about stump and prosthesis care, relaxation, and coping skills.

## 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.

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