Physical Medicine and Rehabilitation (PM&R)

Overview

Physical medicine and rehabilitation (PM&R), also known as physiatry, is a medical specialty that seeks to promote healing and rehabilitation of patients who have suffered injury or disability. Physiatrists treat patients following a stroke or brain or spinal cord injury; they also diagnose and treat acute and/or chronic pain and musculoskeletal injuries suffered in falls, sports, and the workplace. Many specialize in treating back and neck pain.

What is PM&R?

Physiatrists treat the whole person. They address the patient's physical, emotional, and social needs during rehabilitation. Physiatrists direct a rehabilitation team that may include physical or occupational therapists, speech-language pathologists, social workers, and athletic trainers.

PM&R doctors work in clinics, hospitals, and rehabilitation centers.

How can PM&R help me?

PM&R doctors can help patients with chronic disease, pain, or disabilities progress toward optimal function. Rehabilitation involves the use of physical agents and therapeutic exercise to help patients:

- reduce pain
- improve quality of life
- recover from temporary or severe impairment
- learn how to use assistive devices, such as braces, wheelchairs, and walkers.

Medical management

PM&R doctors are trained to treat and control acute or chronic pain with medications and holistic approaches that include mindfulness, Yoga, Pilates, dry needling, and anti-inflammatory diets.

Acute pain is directly related to tissue damage and has an obvious source. Chronic pain, whose origin can be difficult to pinpoint, is persistent and can last for months. In some cases the brain will continue to receive pain signals even after an injury has healed. Chronic pain also is frequently present in ongoing conditions, such as arthritis or cancer.

- **Self care:** Patients can protect their back by using correct posture, by keeping their spine in alignment, and by following through with physical therapy or a regular exercise program. When you are in pain, you need to change the way you approach daily activities. You may need to make adjustments to your workspace and your daily standing, sitting, and sleeping habits. You may also need to learn proper ways to lift and bend.

- **Electromyogram (EMG) and nerve conduction studies:** These tests measure the electrical activity of the muscles and nerves of the body, usually to an arm or a leg. The tests can help identify a nerve or muscle condition such as carpal tunnel syndrome, a pinched spinal nerve, peripheral neuropathy, myositis, or ALS. The presence or absence of injury can be helpful in determining further treatment.

- **Braces:** Wearing a back or neck brace may be advisable while the muscles are being strengthened following surgery or an injury. The brace can decrease muscle spasm and pain as well as help immobilize the spine during the healing process.

Injections and procedures

PM&R doctors perform a variety of minimally invasive tests and treatments to help patients recover from painful conditions. These include:

- **Epidural steroid injection (ESI):** The treatment involves an injection of corticosteroid and numbing medicines directly into the space around the spinal nerves. X-rays are used to help guide the needle to the correct location. Pain relief may last a week to a year. The goal is to enable you to work, resume daily activities, and perform physical therapy.

- **Facet joint injection:** This treatment involves an injection of a corticosteroid and numbing medicines into a painful facet joint in the back or neck. The injection can relieve inflammation and pain; it also can be used as a diagnostic test to determine which joint is causing the pain.

- **Joint injections:** During this procedure, corticosteroid and numbing medicines are injected into the knee, hip, ankle, shoulder, elbow, or hand. The injection is likely to provide a temporary reduction in pain that could enable you to work, resume daily activities, and perform physical therapy.

- **Sacroiliac (SI) joint injection:** During this procedure the doctor injects a corticosteroid and numbing medicine into the large joint in the area of the lower back and buttocks. The injection relieves pain and help determine whether the SI joint is causing your pain or whether the pain is originating from another location.

- **Nerve block injection:** This test is used to determine whether your pain is coming from a nerve or joint. An injection of anesthetic is delivered on or near a pain receptor. Over the next couple hours, patients log their pain relief. If the block is successful, then a radiofrequency ablation may be recommended.

- **Radiofrequency ablation (rhizotomy):** This procedure may be recommended if you have had a successful nerve block. The physician applies a radiofrequency current to burn the sensory nerves surrounding a painful joint and prevent pain signals from reaching the brain. The expected benefits of radiofrequency ablation include pain relief that may last from 6 months to more than 2 years, allowing you to work and engage in daily activities comfortably.

- **Spinal cord stimulator trial:** This test involves the temporary placement of electrodes that deliver electrical pulses to the spinal cord. The electrodes are attached to a small device that resembles a pacemaker. If the electrical pulses successfully override pain signals, thereby reducing pain, the trial is considered a success. The electrodes and stimulator device can then be surgically implanted.

About your office visit

Physiatrists plan treatment based on a thorough evaluation of the patient's medical history, and/or neurological reports, X-rays, and laboratory tests. They can use electromyography (EMG) and nerve conduction tests to evaluate nerve and muscle function. PM&R treatment may include any combination of the following: medication, physical therapy, occupational therapy, massage, exercise, spinal injections, and more.

In coordination with the rehabilitation team, the goal is to improve function in your daily activities. Your progress is carefully tracked until your symptoms have resolved or stabilized. In some cases, symptoms progress, indicating surgery may be needed. If so, your PM&R doctor can refer you to a surgeon for further evaluation.

What training do PM&R doctors have?

A PM&R doctor has completed 4 years of medical school and at least 4 more years of residency training in this field. Certification is through the American Board of Physical Medicine and Rehabilitation.

Sources & links

If you have more questions, please contact Mayfield Brain & Spine at 800-325-7787 or 513-221-1100.

Links
https://www.aapmr.org/patients

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