

Mild Traumatic Brain Injury

Condition: Traumatic brain injury (TBI) occurs when direct or indirect force is applied to the brain, for example, through direct contact to the head, whiplash, or via explosion pressure wave. Mild TBI (mTBI) involves loss of consciousness for less than 30 minutes, other symptoms for up to one day, and no abnormalities on brain imaging like CT Scan.

Background: mTBI is the most common type of brain injury. mTBI, also known as concussion, affects more than 2 million Americans each year. Common causes include falls, automobile and bicycle accidents, sports injuries, and assault. Service Members can be injured by combat-related blasts.

Risk Factors: The best way to prevent mTBI is by avoiding situations where they are more likely to occur. As this is not always possible, lowering the risk should be the goal. Alcohol can increase the risk of mTBI by increasing secondary risk of injuries causing TBI. Seatbelts, car seats, and avoiding impaired/distracted driving will lower the risks associated with transportation. Falls can be prevented through measures like removing throw rugs and other obstacles and by using caution on ice and uneven surfaces. Athletes should use appropriate and updated safety equipment, including helmets. They should also follow proper techniques to avoid putting the head in an unsafe position.

History and Symptoms: The first signs of mTBI may include disorientation, headache, blurred vision, dizziness, sleep disturbance, and difficulty with memory and attention. While symptoms typically are gone within days to weeks, up to 10% of individuals will have symptoms lasting past three months. Individuals with mTBI are expected to have eventual return to full activity and function.

Physical Exam: The physician evaluating you will perform a thorough neurologic examination. This will include testing strength, balance, and thinking/memory. They will also check your vision and how your eyes move and process information. They will also check how your head and neck are moving.

Diagnostic Process: mTBI is a clinical diagnosis, which means it is based on what the physician finds on the history and physical exam. If there is concern for bleeding around the brain, a CT scan may be performed. There are no current lab tests which can accurately and definitively identify mTBI

Rehab Management: You should start with a period of rest for 1-2 days before slowly resuming your normal activities. Physical medicine and rehabilitation (PM&R) physicians, also known as physiatrists, have specialty training in brain injury rehabilitation. They will work with you to develop a treatment plan geared toward your symptoms. PM&R physicians, with the rehabilitation teams they lead, provide individualized care that is focused on helping you achieve the best possible level of function after an injury. The treatment plan can include a combination of medicines and working with physical, occupations, or vision therapists. Other members of the rehabilitation team, including speech therapists, psychologists, neurologists, psychiatrists, vocational rehabilitation specialists, and social workers, may be involved as well.

Other Resources for Patients and Families: The CDC has created the [HEADS UP](#) campaign to provide more information for sports-related mTBI. This website also contains recommendations for returning to activity after injury.

Well-informed and sympathetic family members, friends, coaches, teachers and employers can provide key emotional and functional support during the recovery period. PM&R physicians and rehabilitation team members can provide helpful information to these people to ensure that your needs are addressed consistently as you recover.

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.