

## Medial and Lateral Collateral Ligament Injuries

**Condition:** The medial and lateral collateral ligaments (MCL and LCL) are bands of tissue that connect the thigh bone to lower leg bones at the knee and help stabilize the knee. The MCL is on the inner side of the knee, while the LCL is on the outer side of the knee. Injury to these ligaments is known as a sprain or tear.

**Background:** Injury to either ligament can be caused by sudden twisting or blows to the knee. These injuries usually occur in contact sports, such as football and soccer, or in sports that involve rotation of the knee, such as skiing and ice skating. The MCL is the most commonly injured knee ligament, and LCL injuries are usually associated with more severe knee injuries.

**Risk Factors:** Males have twice the injury rate of females. Individuals who ski or play football, soccer, or rugby have increased risk of collateral ligament injury.

**History and Symptoms:** The mechanism of injury (such as twisting or a blow to the knee), location of the injury, and exacerbating/alleviating factors are important to determine. Pain, swelling, bruising, instability, and inability to fully move the joint are often present.

**Physical Exam:** A physical exam is performed to examine the knee for any deformities, the ability to bear weight on the injured leg, range of motion, swelling, tenderness, looseness of the ligaments, and sensation in the leg.

**Diagnostic Process:** MRI and ultrasound are often used to assess these collateral ligament injuries, although X-rays can also be used to assess if there is also a bone fracture and to aid in diagnosis.

**Rehab Management:** Knee collateral ligament injuries typically heal in weeks to months, depending on injury severity. Bracing of the knee may be beneficial in early rehabilitation, and symptoms may be treated with PRICE (protect, rest, ice, compression, elevation) principles. Strengthening of leg, hip, and abdominal muscles is helpful, and aerobic exercise and conditioning is recommended as soon as possible. Specific sports training should begin when there is no more pain or knee instability. A physical medicine and rehabilitation (PM&R) physician has special knowledge, tools, and resources in diagnosing and managing knee ligament injuries to develop a comprehensive plan of care for the recovery process, without surgery. PM&R physicians are able to assess for injury complications and monitor healing status and can help to improve a patient's overall function and quality of life by personalizing care and return to play. They also work with physical therapists to educate and train patients on how to recover from the injury, reduce the need for surgery, and prevent further knee injuries. Surgery may be necessary to repair severe injuries, when other treatment options fail, or when there is increased knee pain or instability.

**Other Resources for Patients and Families:** The patient and family should be advised that healing of these injuries is typical; however, premature return to sports activities may lead to chronic problems with the knee. Athletic trainers and physical therapists can also be useful resources for rehabilitation.

## 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.