

KNEE MCL SPRAIN

DESCRIPTION

This is a sprain (tear) of one of the 4 major ligaments of the knee. The medial collateral ligament (MCL) is a structure that helps keep the normal relationship of the femur (thigh bone) and the tibia (leg bone) along the inner side of the knee. The MCL is the most commonly injured ligament in sports. It prevents the knee from buckling inwards. When torn, this ligament usually heals, though it may heal in a lengthened position (slightly loose). Sprains are classified into 3 grades: A *first degree* sprain, the ligament is not lengthened, but is painful. With a *second degree* sprain, the ligament is stretched but still functions. With a *third degree* sprain, the ligament is torn and does not function.

FREQUENT SIGNS AND SYMPTOMS

- Pain and tenderness on the inner side of the knee
- A pop, tearing or pulling sensation may be noted at the time of injury
- Swelling and bruising (after 24 hours) at the site of injury
- With lesser degrees of injury, the athlete may be able to continue playing.
- Knee stiffness
- Limping, often walking with bent knee

CAUSES

Force that exceeds the strength to the ligament. This injury usually is the result of a direct blow to the outer side of the knee, usually while the foot is on the ground, though it may also be a result of a non-contact injury.

RISK INCREASES WITH

- Contact sports (football, rugby) and sports that require pivoting and cutting (sudden change of direction) (soccer, baseball)

PREVENTIVE MEASURES

- Proper protective equipment (length of cleats for surface)
- Functional braces may be effective in preventing injury, especially reinjury.

EXPECTED OUTCOME

The MCL usually heals on its own with appropriate treatment. Rarely, isolated severe MCL injuries require surgery.

POSSIBLE COMPLICATIONS

- Frequent recurrence of symptoms, such as knee giving way, instability and swelling
- Injury to meniscal cartilage resulting in locking and swelling of the knee.
- Injury to articular cartilage possibly resulting in knee arthritis.
- Injury to other ligaments of the knee
- Knee stiffness (loss of knee motion)

GENERAL TREATMENT CONSIDERATIONS

Initial treatment consists of medications and ice to relieve pain and reduce the swelling of the knee. Walking with crutches until you walk without a limp is often recommended (you may put full weight on the injured leg). Your physician may recommend a knee brace with a hinge to help regain knee motion while protecting the MCL. Range of motion, stretching and strengthening exercises may be carried out at home, though usually referral to a physical therapist or athletic trainer is recommended. Rehabilitation of MCL sprains usually concentrates on reducing knee swelling, regaining knee range of motion, regaining muscle control and strength and a short period of bracing. For severe MCL sprains or those associated with other knee ligament injuries surgery may be recommended.

MEDICATION

- Non-steroidal anti-inflammatory medications, such as aspirin and ibuprofen (do not take if surgery planned in 7 days or less), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact him/her immediately if any bleeding, stomach upset or an allergic reaction occurs.
- Stronger pain relievers may be prescribed as necessary by your physician. Use only as directed and only as much as you need.

HEAT AND COLD:

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10-15 minutes every 2-3 hours for inflammation and pain, and immediately after any activity which aggravates your symptoms. Use ice packs or an ice massage.
- Heat may be used prior to performing stretching and strengthening activities prescribed by your physician, physical therapist or athletic trainer. Use heat pack or a warm soak.

NOTIFY OUR OFFICE IF

- Symptoms get worse or do not improve in 4-6 weeks despite treatment
- New, unexplained symptoms develop. Drugs used in treatment may produce side-effects.