

KNEE LCL SPRAIN

DESCRIPTION

This is a sprain (tear) of one of the 4 major ligaments of the knee. The lateral collateral ligament (LCL) is a structure that helps keep the normal relationship of the femur (thigh bone) and the tibia (leg bone) on the outer side of the knee. This ligament is the least injured major knee ligament. It usually occurs in association with other knee ligament injuries. It prevents the knee from buckling outwards. When torn, this ligament may potentially heal, though 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 outer side of the knee
- A pop, tearing or pulling sensation may be noted at the time of injury
- Bruising (after 24 hours) at the site of injury
- Knee stiffness.
- Limping, often walking with the knee bent

CAUSES

Force that exceeds the strength to the ligament. This injury usually is the result of a direct blow to the inner side of the knee, usually while the foot is on the ground and the knee is straight. A force to the inner knee is uncommon because the other knee usually protects the injured knee (thus getting hit on the outer side of the other knee).

RISK INCREASES WITH

- Contact sports (football, rugby) and sports that require pivoting, cutting (changing direction) (soccer, baseball)
- Isolated LCL injuries often occur in wrestling
- Poor physical conditioning (strength/flexibility)
- Improper equipment

PREVENTIVE MEASURES

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

EXPECTED OUTCOME

Injury to the LCL alone may heal on its own with appropriate treatment. Occasionally, isolated LCL 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 resulting in knee arthritis.
- Injury to other ligaments of the knee (commonly)
- Injury to nerves causing numbness of the outer leg, foot and ankle, and weakness or paralysis with inability to raise the ankle, big toe and/or lesser toes.
- 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 LCL. 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 LCL 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 LCL sprains, those associated with other knee ligament injuries, or when bone is pulled off with the ligament from its attachment 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 for acute and chronic cases. 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.