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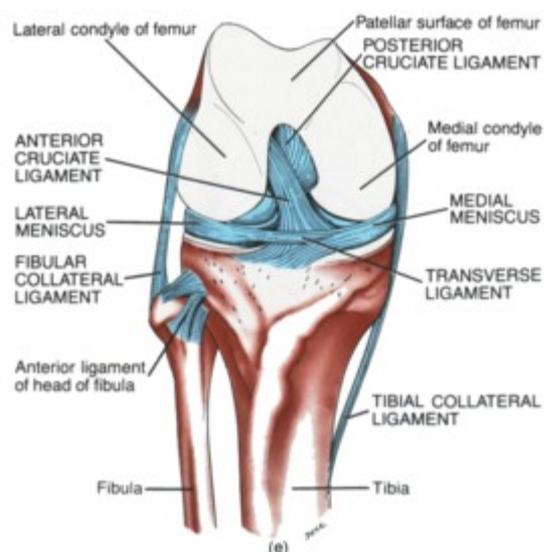
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Medial Collateral Ligament (MCL) Sprain

Anatomy of the Knee

The picture below is a front-on view of the bones, tendons and ligaments that make up the right knee. In the lower corner of the right hand side of the picture there is a ligament called the "Tibial Collateral Ligament." It is this ligament, most commonly referred to as the medial collateral ligament, which is damaged in a MCL injury.



The medial collateral ligament is a flat ligament on the inside (medial) of the knee that connects the tibia (lower leg bone) to the femur (thigh bone). The medial collateral ligament is very important in providing stability to the knee joint.

What is Medial Collateral Ligament Sprain?

As with any other sprain, a MCL injury is the result of excessive stretching or tearing of the ligament. The severity of the injury can range from a slight stretching to a complete

rupture of the ligament.

What causes Medial Collateral Ligament Sprain?

By far the most common cause of medial collateral ligament sprain is a blow or sudden impact to the outside (lateral) of the knee joint. This causes the outside of the knee to collapse inward toward the midline of the body and the inside of the knee (where the

medial collateral ligament is located) to widen and open up. This opening up stretches the ligament, which results in the injury.

What are the Signs & Symptoms of Medial Collateral Ligament Sprain?

The severity of the symptoms tends to correlate with the severity of the injury. In other words, the worse the injury, the worse the symptoms. The most common symptom of a MCL injury is pain around the inside of the knee joint. Also common is bruising, swelling and tenderness.

Medial Collateral Ligament Sprain Prevention

Although it is important to be able to treat MCL injury, prevention should be your first priority. So what are some of the things you can do to help prevent medial collateral ligament sprain?

1. **Warm Up properly**

A good warm up is essential in getting the body ready for any activity. A well-structured warm up will prepare your heart, lungs, muscles, joints and your mind for strenuous activity.

2. **Avoid activities that cause pain**

This is self-explanatory, but try to be aware of activities that cause pain or discomfort, and either avoid them or modify them.

3. **Rest and Recovery**

Rest is very important in helping the soft tissues of the body recover from strenuous activity. Be sure to allow adequate recovery time between workouts or training sessions.

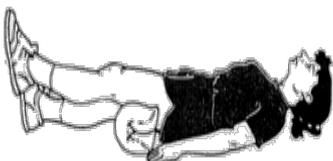
4. **Balancing Exercises**

Any activity that challenges your ability to balance, and keep your balance, will help what is called, proprioception: - your body's ability to know where its limbs are at any given time.

5. **Stretching**

To prevent MCL injury, it is important that the muscles around the knee be in top condition. Be sure to work on the flexibility of all the muscle groups in the leg.

6. **6. Strengthening**



Short-arc extensions are done sitting up or lying down. Use a rolled-up towel to support your thigh while you keep your leg and foot in the air for 5 seconds. Lower your foot as you bend your knee slowly. Repeat

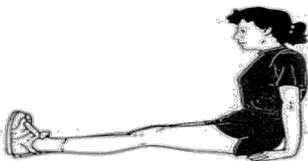
10 times for each leg, twice a day.

Straight-leg raises are done lying down.



Lift your whole lower limb at the hip with the knee extended, and keep it up in the air for 5 seconds. Then lower slowly. Repeat 10 times for each leg, twice a day.

Quadriceps isometric exercises are done sitting up,



with your legs extended in front of you. Tighten your quadriceps muscles by pushing the knees down onto the floor. Hold for 5 seconds. Repeat 10 times each leg, twice a day.

Stationary bicycling on low tension setting improves your exercise tolerance without stressing your knee. Adjust your seat high enough so that your leg is straight on the down stroke. Start with 15 minutes a day and work up to 30 minutes a day.



7. Footwear

Be aware of the importance of good footwear. A good pair of shoes will help to keep your knees stable, provide adequate cushioning, and support your knees and lower leg during the running or walking motion.

8. Strapping

Strapping, or taping can provide an added level of support and stability to weak or injured knees.