

# Holladay Physical Medicine

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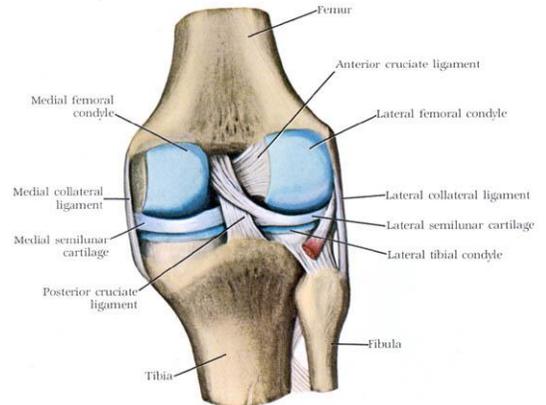
This Information is about this condition in general. Every individual has a unique presentation. Once you understand this information, consult the doctor on any specific questions about your condition.

## Knee Sprain

**Also Known As:** Knee ligament tear, knee ligament injury

Knee sprain means that you have injured one of the ligaments around the knee joint. Saying you have a "knee sprain" is not a terribly useful diagnosis for two reasons:

- **First:** it does not tell you which ligament is injured. This is important because different ligaments are treated very differently. For example, ACL (anterior cruciate ligament) injuries often need surgical reconstruction. On the other hand MCL (medial collateral ligament) injuries seldom require surgery.
- **Second:** it does not tell you how badly the ligament is injured. The reason this is important is that minor injuries usually require simple treatment. More severe injuries may require more substantial treatment, rehabilitation, and if not handled properly at first, possibly surgery.



**The tissues of the knee that are usually sprained in the order of frequency are:**

Joint Capsule

ACL (anterior cruciate ligament) Injuries

PCL (posterior cruciate ligament) Injuries

MCL (medial collateral ligament) Injuries

LCL (lateral collateral Ligament

Medical Meniscus

Lateral Meniscus

It is rare that sprains of the knee affect only

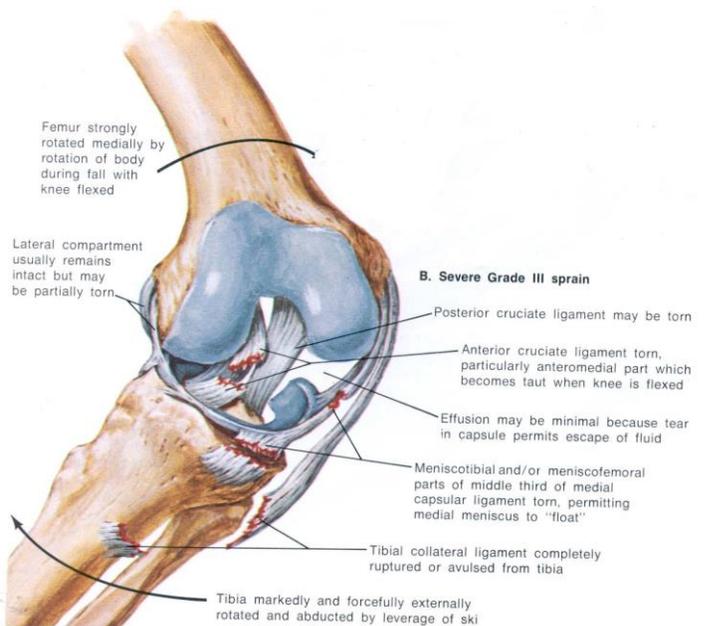
Mechanisms of Knee Sprains

**A. Mild Grade III sprain**

Tear of middle third of medial capsular ligament (either meniscofemoral part as shown or meniscotibial part) by external rotation and abduction of tibia

Gap in capsule may minimize effusion by permitting leakage of fluid

Tibial collateral ligament partially or completely disrupted or avulsed



one of the tissues above and rarely is attention required to only one as well. That is why I have provided this

information all together. Rehabilitation of the knee joint must be approached as a unit. Often, when surgery is performed, post surgical rehabilitation focuses on one ligament or disc only and fails to involve the other structures.

### **Symptoms also include:**

- Pain on walking, running or standing.
- Pain when you lie on your side in bed.
- Pain on the outside of the thigh and down the side of the leg.
- Pain in the back of the leg which is often worse at night.
- Stiffness in the back of the leg and knee joint.



### **What is the outlook (prognosis) for knee sprain?**

Without treatment, including exercise, the knee frequently permanently loses full function. The knee joint is susceptible to osteoarthritis, which if left untreated, stimulates a great deal of knee replacement surgery nowadays. With treatment, however, knee pain can be relieved and full function can be restored. Other surgeries are becoming very popular when patients prefer not to exercise. Exercise, however is always required after surgery to be successful. Thus, we prefer to follow the exercise protocols strictly and avoid surgery if possible.

### **Treatment and Rehabilitation**

Treatment time can be expected at 4-6 weeks. The first 2-3 weeks is the acute phase and is concerned with reducing pain, inflammation and encouraging soft tissue healing. The post-acute phase is the remaining 2-3 weeks where the goal is to correct any muscle imbalances and tracking problems that might be an aggravating factor in the condition.

1. Ozone injection into the musculotendinous junctions
2. Bi-polar electrical stimulation
3. TheraGun percussive massage
4. Manipulation of the joints
5. Eccentric Exercise routines
6. Elimination of repetitive friction motions will relieve the symptoms.

### **Recommendations:**

1. For acute situations, utilize ice packs on the affected area until numbness is reached.
2. Eliminate bent leg weight bearing and rotational torsion
3. Bracing may be indicated at first.

## **USE OF PRESCRIPTION DRUGS**

We do not prescribe drugs nor recommend their use if harmful side-effects are associated with your complaints. We also do not, in any case, recommend changes in the use of prescription drugs that a licensed physician has given you. If you believe alterations in those prescriptions are in the best interest of your health, always consult with the prescribing physician before making any changes.

## **NUTRITION AND SUPPLEMENTATION:**

The ideal situation for nutrition in any injury or disease is first to eat whole foods, and to avoid processed foods, fast foods preservatives, refined carbohydrates and sugar. We have much information on our web page under Absolute Health Clinic. The physical medicine modalities we will provide you will help reduce the symptoms in the time we have projected. If you want to heal, this step is something you will need to take.

Nowadays, even if you do all of those things, you need to realize that our food supply has been gradually depleted. The pure ingredients needed to maintain body function, metabolism and immunity have been drastically reduced. We recommend only whole food supplements. Studies are clear that synthetic vitamins and mineral supplements are not only not helpful to the body in most cases, but can be toxic. Don't expect them to take the place of what we recommend here. They will not help you sufficiently to heal properly. The following list has been prioritized to help you gradually begin to supplement your improved diet and provide your body with the ingredients it needs to restore or improve your immune response and then provide the raw materials in usable form to repair the damaged or diseased tissue. The degree to which you can implement these items will largely determine how fast you recover and more importantly whether or not you have a recurrence or relapse of the symptoms again soon.

These products are all produced by Standard Process. You may obtain them on line from Amazon or other distributors if you like or we can order them for you and save you an average of \$5 per bottle plus you can avoid shipping charges.

### **GENERAL DAILY SUPPLEMENTS**

- Catalyn
- Tuna Omega-3 oil
- Calcium Lactate
- Trace Minerals B12
- Cataplex D
- Prolamine Iodine

### **SPECIFIC FOR THIS CONDITION**

- Biost
- Glucosamine Sulphate
- Ligaplex II
- Calcifood

Specific dosages will be provided by the doctor.

We have many other specific items for a variety of health deficient conditions. Consult our web page or ask the doctor.

## **HOME REMEDIES AND MEDICINES**

After the first 1-3 days when you should be using 5-8 minutes of cold packs, utilize moist heat packs on a daily basis during the first phase of treatment. 15 minutes is the maximum therapeutic dose for heat in this condition. The application may be repeated with at least 15 minutes of non-heat rest in between. This will help relax tight muscle fibers and bring blood to the region. Hot tubs and baths with Epsom salts provide temporary relief.

The use of over-the-counter medications for pain and inflammation may be seen as necessary at first depending on your pain level and tolerance. Understand that we depend on your natural immune response to

function well in order to heal this disorder. Some pain relievers and most anti-inflammatory medications shut off the inflammatory response which is what triggers your body's immune response mechanisms. If you need pain medicines of any kind to continue to function or to be able to do the exercise routines we have recommended, use good judgement in when you use them. We strongly suggest you consider ice packs for 5-10 minutes for pain relief and mechanical positioning of the injured areas to relieve pressure and pain. The more you are able to do these procedures and avoid medications, the faster your immune response will be effective and the sooner you will be out of pain and begin healing. The sooner you can stop taking pain medication, the better it will be for your healing.

## **EXERCISES:**

Exercises should be specific, performed at the right time and in a particular order. They should be simple and aimed at pain relief and stabilization at first. Seek advice from your chiropractic physician on when to do these exercises and how often. When performed correctly, rehabilitation exercises can be the key to avoiding multiple episodes of pain and maintaining the function of the muscles and joints.

Our goal here is to have you begin exercises as soon as the joint mobility has been restored sufficiently. Consistent and proper exercise rehabilitation will shorten your treatment time and help reduce recurrence of the same disorder.

We offer a video training featuring exercises specifically designed and proven effective if properly performed for the rehabilitation of this condition. These video files are available on our web page at [www.holladayphysicalmedicine.com](http://www.holladayphysicalmedicine.com) ---follow that link, then the exercise pulldown menu at the top center of the home page, choose therapeutic and then scroll down to:

Knee,

then also and review

foot and ankle

and perform them daily as soon as you can work it into your schedule. Along with the physical medicine we have recommended, it is the regular performance of these exercises that will get you well and keep you well.

## **OTHER INFORMATION:**

We offer a wide variety of health information at our web site. [www.holladayphysicalmedicine.com](http://www.holladayphysicalmedicine.com) All patients are welcome to use our information to improve your life and maintain your spinal health.

This information is provided to you as a health service by Dr. Bruce Gundersen, DC, DIANM. He is board certified by the International Academy of Neuromusculoskeletal Medicine and currently serves as chairman of the examination board for the Academy. He is also the President of the Utah College of Chiropractic Orthopedists and clinical director and chief clinician at Holladay Physical Medicine. He has practiced physical and regenerative medicine for over 40 years.