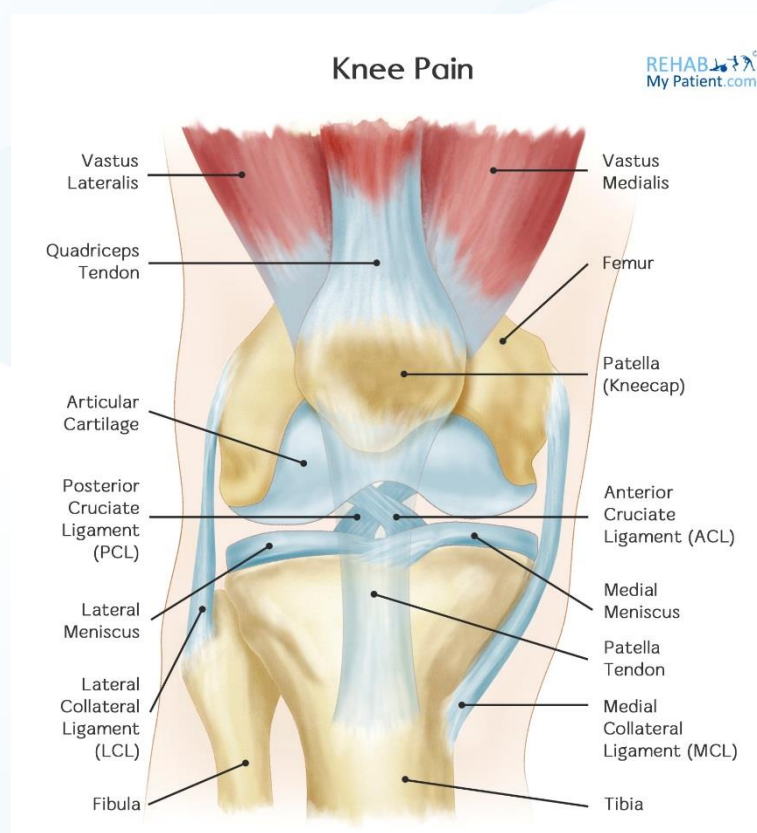


# Knee Pain

Knee pain is a very common problem affecting people of all ages. Knee pains could be caused by an injury or can be an effect of the aging process of the joint. Less common reasons for having knee pain are infections or other medical conditions like arthritis or gout. Knee pain can occur in children, and any knee pain in a child should be investigated.

The knee joint is a large hinge joint and is made up by the lower end of the thigh bone (known as the femur), upper end of the shin bone (tibia) and the knee cap (patella). Movement of the knee is controlled by large muscle groups known as the quadriceps (at the front of the thigh) and the hamstrings (at the back of the thigh). There is a structure known as a meniscus which cushions the joint and helps in shock absorption when the knee is in action.

The knee joint is one of the primary movers for walking, climbing and sitting type activities. It is not only a mover of the legs but also acts as a stabiliser and supports the body whilst standing.



There are many factors which may lead to the cause of knee pain. These tips and exercises are used as a guide to help you manage your knee pain effectively; however it is recommended that if the pain persists or gets any worse that you seek advice from a physio, osteopath or your GP.

Knee injuries can affect any knee structure: ligament, tendon, bursa, bone.

The most common knee injuries are:

1. ACL tear – ACL is the anterior cruciate ligament which is very important ligament stabilizing the knee joint. It is a common type of injury for people who play football, basketball, badminton or any other sports involving sudden change of direction.

Although it was commonly known that a torn ACL will not heal without a surgery, recent studies reveal that about 60% of patients who delayed the surgery and conducted physical therapy never needed surgery later on.

2. Fractures – Fractures usually occur during motor vehicle collisions, falls or playing contact sport like football or rugby. People whose bones have been weakened by osteoporosis can sometimes sustain a knee fracture during a fall.
3. Meniscus injuries – Meniscus is like cartilage and functions as a shock absorber situated between femur (upper leg bone) and tibia (lower leg bone). When the meniscus tears due to the natural aging process, it is referred to as a degenerative meniscus tear.
4. Bursitis – Bursitis is a small sack full of fluid which acts like a cushion and allows ligaments, tendons to glide easily over the joint. Bursitis is usually easy to treat and responds well to cold therapy. Sometimes a bursitis needs to be treated with anti-inflammatory medications, or steroid injection/aspiration.
5. Tendonitis – Patellar tendinopathy (or as it is commonly known patellar tendonitis or tendinitis) is an overuse injury affecting your knee. It is the result of your patella tendon being overstressed. A common name for it is Jumper's Knee.

#### **How to Treat Knee Pain:**

Although there could be many reasons to have a knee pain the main basic principle remains the same

- 1. Rest**

While the knee is acutely painful, discontinue any activities where you find pain and discomfort. Try substituting with a different activity until the pain subsides.

- 2. Ice**

Apply ice to the affected area for 5-10 minutes at a time three times per day. Ensure to wrap the ice with a thin towel to prevent an ice burn from occurring on your skin. Ice is one of the best and most natural ways to reduce pain and swelling.



### 3. **Anti-Inflammatory Medication**

Non-steroidal anti-inflammatory medication, aspirin or acetaminophen can help to reduce the inflammation and pain within the knee. As the inflammation goes down, the amount of pain felt will also tend to decrease. Limit the use of drugs if possible, and look for more natural methods such as ice therapy.

### 4. **Injection**

It might also be necessary to have an injection which is usually a steroid and anaesthetic solution put into the knee joint, which will often provide you with prompt relief to the affected area.

### 5. **Therapy**

Physical therapy, laser, acupuncture, and electrotherapy can all provide very good benefit for a knee pain.

## Tips:

- 1.** For those who are overweight, reducing weight and improving fitness can reduce the pain. Losing a few pounds can make a world of difference in your pain and overall health.
- 2.** Before participating in any sporting activities, make sure you take the time to stretch beforehand.
- 3.** Avoid excessive periods of keeping your knee in one position, such as being stuck in a tight seat.
- 4.** Stretching the hamstrings before you engage in any exercise or training regime will help to alleviate injuries to the area.
- 5.** If you notice the pain increasing when climbing stairs or exercising, you need to seek attention to evaluate the severity of your knee injury.
- 6.** Increase muscle power  
Increasing knee strength can benefit your knee stability. Stronger muscles will provide better support for the knee joint reducing the risks of injuries.
- 7.** Improve your balance  
This will reduce chances of having falls and improves your knee stability.
- 8.** Keep your knee flexible  
Try to maintain your knee flexibility. This will slow down the process of ageing of the knee joint.