## Introduction

Knee pain is a common issue that disturbs life of the people of all ages. Knee pain can be the result of an injury such as a sprain or torn cartilage. Medical conditions – arthritis, gout, and infections – can also cause knee pain.

Most types of knee pain respond well to self-care measures. Some physical therapies can help reduce knee pain. But in some cases, your knee may require surgical treatment.

## **Markings**

The position and wickedness of knee pain can differ reliant on the basis of the problem. Usual signs and indicators of knee pain consist of:

- Swelling and stiffness
- Red and warm to the touch
- Weakness or instability
- To make or reduce sound
- Inability to fully straighten the knee

## When seeing a doctor

Call your doctor if you have:

- You can't bear weight on your knees, or your knees feel unstable or give out
- Knee swelling noted
- · You cannot fully extend or flex your knee
- Look for obvious deformity in your leg or knee
- In addition to redness, pain, and swelling in your knee, you may have a fever
- I have knee pain related to injury

### Causes

Knee pain can be a result of damages, mechanical illnesses, forms of swelling, and some other issues as well.

# **Injuries**

Some of the most known knee injuries are listed below:

### ACL injury.

An ACL injury is a tear of the anterior cruciate ligament (ACL)—one of the four ligaments that connect your shin bone to your thigh. ACL injuries are more common in people who play basketball, football, or other sports that require a sudden change of direction.

#### **Knocked Knee bones**

Including the kneecap (patella), can be broken in a fall or car accident. Also, people whose bones are weakened by osteoporosis can sometimes sustain a broken knee by taking the wrong step.

#### A fixed Meniscus

The meniscus is the strong, elastic cartilage that acts as a friction absorber amongst your thigh bone and thigh. If you suddenly bend your knee while lifting up the weights, you can injure it.

#### **Knee bursitis**

Some knee injuries cause bursae to swell, small sacs of fluid that cushion the lining of your knee joint, and tendons and ligaments can slip over the joint.

#### Patellar tendinitis.

Tendinitis causes irritation and swelling of one or more tendons – the thick, fibrous tissue that connects muscles and bones. This swelling can occur when the patellar tendon, which runs from the knee (patella) to the shin bone and allows kicking, running and jumping, is injured. Runners, skiers, cyclists, and people who do sports can develop patellar tendinitis.

# **Mechanical problems**

Certain examples of mechanical complications that can root knee pain include:

The body is empty. Often a wound or injury to the bone or cartilage can break some part of the bone and drift together in space. This does not cause any issues unless the loose body affects the movement of the knee joint, in this situation the effect caused is same something like a pencil caught on a doorknob.

Iliotibial band syndrome. This happens when the band of tough tissue that runs from the outside of your kidney to the outside of your knee (iliotibial band) becomes so tight that it rubs against the outside of your thigh. Intermediate runners and cyclists are particularly susceptible to iliotibial band syndrome.

A split knee. This often occurs when the triangular bone that shields the front part of your knee known as patella, usually slides out of your knee. In some cases, the knee may be outside the incision and you can see the area.

Hip or leg pain. If you have heart or leg pain, you can change the way you walk to relieve your joint pain. But this altered gait can put more stress on your knee joints and cause knee pain.

## Types of arthritis and it's effect on the knee pain

There are more than 100 types of arthritis. Types that can affect the knee include:

Osteoarthritis. Sometimes called degenerative arthritis, osteoarthritis is the most common form of arthritis. This is a degenerative condition that occurs when the cartilage in your knee deteriorates with use and age.

Rheumatoid arthritis. The most debilitating form of arthritis, rheumatoid arthritis, is an autoimmune condition that can affect the joints in your body, including your knees. Although rheumatoid arthritis is a chronic disease, its severity can fluctuate and even come and go.

Gout. This kind of ache happens when uric acid crystals form up in the joint. Though gout generally affects the big toes, it can also distress the knees.

Pseudogout. Often mistaken for gout, pseudogout is caused by calcium-containing crystals growing in the joint fluid. The knee is the most common joint to experience pseudogout.

Septic arthritis. Sometimes your knee joint can become infected, causing swelling, pain, and redness. It is often accompanied by fever, and there is usually no injury before the pain begins. It can quickly damage the knee cartilage. If you have knee pain and any of the symptoms of septic arthritis, see your doctor immediately.

## **Risk factors**

There are some causes that can upturn your chances of knee problems, these are:

Overweight. Being overweight or obese increases the stress on your knee joints, even during normal activities like walking or climbing stairs. It also accelerates the breakdown of joint cartilage, increasing the risk of osteoarthritis.

Lack of muscle flexibility or strength. Lack of power and elasticity can increase the chancesof knee injury. Strong muscles help in alleviate power to your joints.

Certain sports or Professions. Some sports stress your knees more than others. Skiing with stiff ski boots and possible falls, mountain basketball jumps with spikes, and repetitive knocks on your knees while running or jogging all increase the risk of knee injuries. Mechanisms that involve continuous stress on the knees, like construction or farming, can also add injury risk.

Previous injury. An earlier knee injury increases your chances of getting your knee injured again.

# **Complex situation**

Not all knee pain is serious. However medical situations such as knee ache can lead to increased pain, joint injury and failure if not taken seriously. An injury to your knee, even a negligible one, can lead to parallel injuries in the upcoming time.

## **Preventions**

Though it is not always promising to avoid knee pain, the following references can prevent injury and decline of the joint:

Keep extra pounds off. Maintain a healthy weight; This is one of the best things you can do for your knees. Every extra pound puts extra stress on your joints, increasing your risk of injury and osteoarthritis.

Get in shape to play your sport. To prepare your muscles for the demands of sports participation, spend time conditioning.

Have a great workout. Make sure your technique and movement patterns are optimal for your sport or activity. Professional lessons can be very helpful.

Be strong, be flexible. Weak muscles are the main cause of knee injuries. You will benefit from building quadriceps and hamstrings, the muscles in the front and back of your thighs, which will help support your knees. Balance and stability exercises help the muscles in your knees work more efficiently.

Since tight muscles can also contribute to injury, stretching is important. Try incorporating leg exercises into your workouts.

Be smart about training. If you have osteoarthritis, chronic knee pain, or repetitive strain injuries, you may need to change your exercise routine. Start doing activities such as swimming, aerobic exercises, and other low-impact activities – at least a few days a week. Sometimes just limiting high-impact activities will provide relief.