# Jumper's Knee

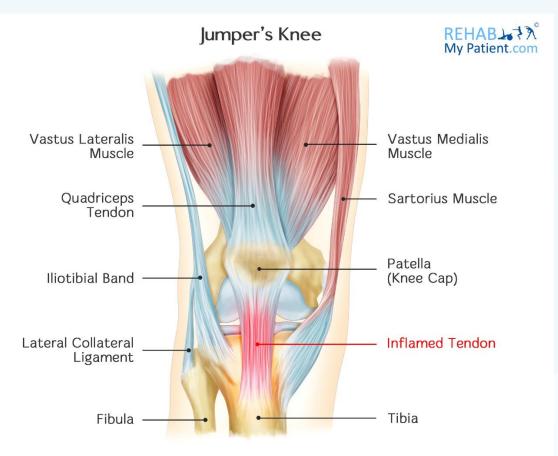
Jumper's knee was first described back in 1973 as a way to describe a tendon injury or inflammation often seen in athletes, especially jumpers. It often involves where the kneecap tendon (known as the patella tendon) is attached to the shin bone. The term can also apply to inflammation or injury where the muscles of the thigh tendon are attached to the upper part of the kneecap pole or where the lower leg bone and the kneecap tendon are attached. The condition refers to functional stress overload as the result of jumping. It can also occur from weight training, especially squatting.

Jumper's knee can be very chronic, and cause a lot of persistent pain. It can be hard to treat, and requires time to get rid of the injury.

Jumper's knee is sometimes known as patella tendinopathy, or patella tendonitis (literally meaning inflammation of the tendon of the patella).

## **Jumper's Knee Anatomy**

The knee is one of the biggest and most complex of all joints found in the body. It joins the shin bone and the thigh bone together. The smaller bone running alongside of the tibia and the kneecap are the two other bones that complete the knee joint. Tendons keep the leg muscles and knee bones connected to enable the knee joint to move. Ligaments join all of the knee bones and deliver stability to the knee.



The big group of muscles in your thigh is known as the quadricep muscle group, and they consist of four muscles. These muscles join into the knee cap (patella) and then form a common tendon known as the patella tendon. Just below the patella is an area which is under a lot of stress and this is where the inflammation typically occurs.

# **How to Treat Jumper's Knee:**

#### 1. Modification of Activities

Decreasing the activities that are causing an increase in pressure in the upper leg and the kneecap is important. Certain types of loading exercises might be prescribed, but you should refrain from squatting or jumping.

## 2. Cryotherapy

Apply ice to the affected area for 5-10 minutes at a time three to five times per day. After performing any activities where pain worsens, you want to make sure and take heed of the ice to help bring you relief. Apart from manual therapy, Ice is one of the most important things you can do for your knee.

# 3. Stretching

Stretch the flexors of the knee and the hip, the extensors of the knee and hip, the iliotibial band and the surrounding structures and tissues that make up the kneecap. Your manual therapist will advise on the best exercises for you.

## 4. Injection

If you find that aching is still present after using ice on the area and trying to rest, you might need to consider a cortico-steroid injection. It can help to reduce inflammation, but it is painful and the pain can last for a couple of days following the injection. Some people report that the results are short-lived, but actually it can provide a window of pain-relief in which to get therapy which can give you considerable improvements.





#### 5. Shockwave

Shockwave may be useful in cases of patella tendinopathy. Typically around 2000 shots of shockwave is used directly over the patella tendon, under the kneecap. Compressed air to "fire a bulled" within the applicator to generate the shock. This can stimulate the tendon into healing.

#### Tips:

- To help minimize your risk of getting jumper's knee, avoid playing on hard surfaces and be very careful with overtraining, especially if you are a jumper of you do a lot of squatting.
- If you have excess weight, you might want to consider losing a few pounds and try to get to your ideal weight. This will help to take some of the added load off your knees.
- Repetitive stress on the joint from jumping is one of the main causes of the condition.

- This particular injury is specific to athletes, especially those who play volleyball, basketball and high-jumping.
- Sometimes the condition can be found in those who engage in weight lifting or cycling. Reduce the amount of cycling you are doing or reduce the squatting.