

PATELLA TENDINITIS

Patellar tendinitis is an injury or inflammation to the tendon connecting your kneecap (patella) to your shinbone (tibia). The patellar tendon works with the quadriceps muscle to extend your knee so that you can run, kick and jump.

Patellar tendinitis, also known as jumper's knee, is most common in athletes whose sports involve frequent jumping, such as basketball and volleyball. However, even people who do not participate in jumping sports can get patellar tendinitis. Patellar tendinitis is a common overuse injury, caused by repeated stress to the patellar tendon that results in tiny tears in the tendon, which cause pain and inflammation.

Pain over the patella tendon is the first sign of symptoms, which may occur after physical activity or after an exercise program or recreational activities. Initially, you may only feel pain after physical activity. Over time, the pain increases and begins to interfere with desired activities, especially climbing stairs or arising from a chair.

A combination of factors may contribute to the development of patellar tendinitis, including:

- **Physical activity.** Running and jumping are most commonly associated with patellar tendinitis. Sudden increases in how hard or how often you engage in the activity also add stress to the tendon.
- **Tight leg muscles.** Tight thigh muscles including the quadriceps and hamstrings, can increase strain on your patellar tendon.
- **Muscular imbalance.** If some muscles in your legs are much stronger than others, the stronger muscles could pull harder on your patellar tendon.

EXAMINATION AND IMAGING

During the exam, we will palpate areas of tenderness. Usually, pain from patellar tendinitis is on the front part of your knee, just below your kneecap. Following

observations for swelling or deformity, the knee motion will be checked, along with the flexibility and strength of your muscles.

To assist in defining the condition we may suggest one or more of the following imaging tests:

- **Radiographs.** Radiographs help to exclude other bone problems that can cause knee pain.
- **Ultrasound.** This test uses sound waves to create an image of your knee, revealing the structure of the patellar tendon.
- **Magnetic resonance imaging (MRI).** MRI creates detailed images that can reveal subtle changes in the patellar tendon, as well as the other structures around the knee joint.

TREATMENT

Nonsteroidal anti-inflammatory medications, such as ibuprofen (Advil or Motrin) or naproxen sodium (Aleve) may provide short-term relief from pain associated with patellar tendinitis.

Initial treatment usually begins with physical therapy to stretch and strengthen the muscles around the knee.

A variety of physical therapy techniques can help reduce the symptoms associated with patellar tendinitis, including:

- **Stretching exercises.** Regular, steady stretching exercises can reduce muscle stiffness and help lengthen the muscle-tendon unit.
- **Strengthening exercises.** Weak thigh muscles contribute to the strain on your patellar tendon. Exercises should focus on strengthening the quadriceps and hamstring muscles.

Surgical treatment is rarely needed and is reserved for recalcitrant cases that do not respond to nonoperative treatment.