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Runner's Knee

Patellofemoral pain syndrome is a broad term used to describe pain in the front of the knee. It is also called "runner's knee" or "jumper's knee" because it is common in people who participate in sports, but it can occur in nonathletes as well. In some cases there is softening of the cartilage behind the patella (kneecap) in which case the term chondromalacia is used. The pain and stiffness it causes can make it difficult to climb or descend stairs, kneel down, sit for prolonged periods with the knee bent, and perform other everyday activities. The problem can arise with malalignment of the kneecap or overuse. Patellofemoral pain syndrome occurs when nerves sense pain in the soft tissues and bone around the kneecap. Symptoms are usually relieved with conservative treatment, such as NSAIDs such as ibuprofen or Aleve, and a therapeutic exercise program. In some cases cortisone injection is also used.

Diagnosis: The condition is diagnosed by physical examination. If your doctor is concerned you may have arthritis, an xray may be taken. In most cases an MRI is not necessary, but in cases that don't respond rapidly to conservative treatment, an MRI may be obtained to evaluate for chondromalacia.

Treatment:

NSAIDs: nonsteroidal anti-inflammatory medications such as Advil or Aleve can relieve pain and swelling while a therapeutic exercise program is instituted.

Cortisone injection: In more severe cases or where swelling is present, cortisone injection is sometimes recommended.

Physical therapy exercises. Specific exercises will help you improve range of motion, strength, and endurance. It is especially important to focus on strengthening and stretching your quadriceps since these muscles are the main stabilizers of your kneecap. Core exercises may also be recommended to strengthen the muscles in your hips, abdomen and lower back.

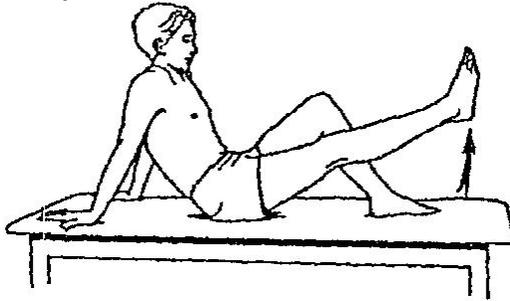
Orthotics. Shoe inserts can help align and stabilize your foot and ankle, taking stress off of your lower leg. Orthotics can either be custom-made for your foot or purchased "off the shelf." Most people do fine with off the shelf orthotics.



Surgery: Surgery is rarely needed for this condition. For severe cases that don't respond to conservative care, arthroscopy may be performed. This involves inserting a small camera, into your knee joint which is used to guide surgical instruments. In some cases, removing damaged articular cartilage from the surface of the patella can provide pain relief. If the lateral soft tissue is pulling the patella out alignment, a lateral release procedure can loosen the tissue and correct this. In some cases, it may be necessary to realign the kneecap by moving the patellar tendon along with a portion of the bone.

Basic Exercises: These are meant to get you started before a formal rehab program. Do them to the degree that they are comfortable. Do not exercise through pain.

1. **Straight leg raise:** Lie on the floor with the uninjured leg bent to protect your low back. For your injured leg: turn your toes out about 30 degrees, contract your quadricep and lift your leg 6-12 inches off the ground. Hold for a count of 3, then slowly lower down over a count of 5. Do 2 sets of 10 repetitions



2. **Hip Abduction:** Lie on your side with your injured leg up. Contract your quadricep and then lift your leg about 12 inches off the ground. Hold for a count of 3 then lower slowly over a count of 5. Do 2 sets of 10 repetitions.

