

WHAT IS PATELLOFEMORAL PAIN SYNDROME?

Patellofemoral pain syndrome is pain at the front of your knee, around your kneecap (patella). Sometimes called "runner's knee," it's more common in people who participate in sports that involve running and jumping.

The knee pain often increases when you run, walk up or down stairs, sit for long periods, or squat. Simple treatments — such as rest and ice — often help, but sometimes physical therapy is needed to ease patellofemoral pain.

Symptoms

Patellofemoral pain syndrome usually causes a dull, aching pain in the front of your knee. This pain can be aggravated when you:

- Walk up or down stairs
- Kneel or squat
- Sit with a bent knee for long periods of time

If the knee pain doesn't improve within a few days, consult your doctor.

Diagnosis

Your doctor will ask about your history of knee problems and will press on areas of your knee and move your leg into a variety of positions to help rule out other conditions that have similar signs and symptoms.

To help determine the cause of your knee pain, your doctor might recommend imaging tests such as:

- A small amount of radiation passes through your body in the process of creating X-ray images. This technique visualizes bone well, but it is less effective at viewing soft tissues.
- These combine X-ray images from various angles to create cross-sectional images of internal structures. CT scans can visualize both bone and soft tissues, but the procedure delivers a much higher dose of radiation than do plain X-rays.
- Using radio waves and a strong magnetic field, MRIs produce detailed images of bones and soft tissues, such as the knee ligaments and cartilage. But MRIs are much more expensive than X-rays or CT scans.

You can also visit a sports and exercise therapist who, using a detailed history described by you, alongside a series of physical assessments, will be able to diagnose the problem and provide you with a treatment plan.

Treatment

Treatment of patellofemoral pain often begins with simple measures. Rest your knee as much as possible. Avoid or modify activities that increase the pain, such as climbing stairs, kneeling or squatting.

Medications

If needed, take over-the-counter pain relievers, such as acetaminophen (Tylenol, others), ibuprofen (Advil, Motrin IB, others) or naproxen sodium (Aleve). ALWAYS CHECK WITH YOUR GP OR THE PHARMACIST before taking any medication if you are not certain it is okay for you to do so.

Therapy

A sports and exercise therapist might suggest:

- Specific exercises can strengthen the muscles that support your knees and control limb alignment, such as your quadriceps, hamstrings and the muscles around your hips, especially hip abductors. Correcting inward movement of the knee during squatting is a primary goal.
- Knee braces or arch supports may help improve pain.
- Your physical therapist may show you how to tape your knee to reduce pain and enhance your ability to exercise.
- Icing your knee after exercise might be helpful.
- During your recovery, you may want to restrict yourself to low-impact activities that are easier on the knees — such as bicycling and swimming or water running.

Surgical and other procedures

If nonsurgical treatments aren't effective, your doctor might suggest:

- During this procedure, the doctor inserts a pencil-thin device equipped with a camera lens and light (arthroscope) into your knee through a tiny incision. Surgical instruments are passed through the arthroscope to remove fragments of damaged cartilage.
- In more-severe cases, a surgeon may need to operate on your knee to realign the angle of the kneecap or relieve pressure on the cartilage.