

PATELLOFEMORAL PAIN

Pain around the front of the knee is often referred to as patellofemoral pain. This pain may be caused by soft cartilage under the kneecap (patella), pain from another area such as the back or hip, or soft tissues around the front of the knee.

In athletes, soft tissue pain in the front of the knee is fairly common. This may come from straining one or more of the following tendons:

- Patellar tendon - connects the kneecap to the lower leg bone
- Quadriceps tendon - connects the kneecap to the upper leg bone
- Retinaculum tendon - supports the kneecap on both the left and right sides

Some patellofemoral pain is caused because the kneecap is abnormally aligned. If it is not correctly aligned, it may come under excessive stress, particularly with vigorous activities. This can also cause excessive wear on the cartilage of the kneecap, which can result in chondromalacia.

Treatment depends on the specific problem causing the pain. If the soft tissues are the source of the pain, stretching, particularly in the face down (prone) position, can be very helpful to make the support structures more resilient and flexible. One simple stretch is to lie face down, grab the ankle of the affected leg with one hand and gently stretch the front of the knee. Hamstring (rear thigh) stretching can also be very helpful. It helps to warm up before doing these or any other stretches.

Other treatments may involve exercises to build up the quadriceps muscle, taping the patella or using a specially designed brace which provides support specific to the problem. Using ice and non-steroidal anti-inflammatory medications can also be helpful. It is often necessary to temporarily modify physical activities until the pain decreases.

In more extreme situations, a specific surgical procedure may be needed to help relieve the pain. If the cartilage under the kneecap is fragmented and causing problems, arthroscopic removal of the fragments may be helpful. If the patella is badly aligned, however, a surgical procedure may be needed to place the kneecap back into proper alignment, thereby reducing abnormal pressures on the cartilage and supporting structures around the front of the knee.

In some people, particularly those who have had previous knee surgery, there may be a specific painful area in the soft tissue around the patella which may require resection (removal).

Good general conditioning is important to prevent patellofemoral pain. Stretching, particularly in the prone position, will keep the supporting structure around the front of the knee flexible and less likely to be irritated with exercise. Proper training, without sudden increases of stress to the front



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