



Patellofemoral Pain Disorder

Questions and answers to problems related to patellofemoral (kneecap) pathology:

What is the Patella?

The patella (kneecap) is the bone on the front of the knee which is attached to the quadriceps (thigh musculature) and enables knee extension (straightening out of the knee) to occur at a biomechanical advantage. It also protects the front part of the knee.

What are common complaints with kneecap pain?

When the knee is “straight”, the kneecap has very little pressure on it. When the knee is bent, this increases pressure on the kneecap. For this reason, people with kneecap problems often complain of stiffness or ache when sitting in a movie, theater, on a long car ride, going up or down stairs, or squatting and kneeling. Catching or clicking may also accompany the other symptoms.

What is chondromalacia?

Chondro means cartilage; malacia means softening. This relates to the pathologic condition of softening of the undersurface of the patella, producing kneecap symptoms as described above. Intact cartilage is a protective covering of the bone. When the cartilage is damaged or work away, pain can occur, described as an ache, or intermittent sharp pain with twisting.

How does one get chondromalacia?

This can be developmental, as a result of malalignment (excess pressure is exerted on the patella bone surface from rubbing against the prominence of the femur), or can be a result of direct trauma to the surface of the knee (e.g., an auto accident in which the front part of the knee hits the dashboard).

What is a “tracking” problem of the patella? What is a subluxing or dislocating patella?

The patella moves in a groove or valley of the femur, and in certain cases it “slips” out of the groove. This may be a partial “slippage” termed a subluxation, or a complete dislocation, where the kneecap comes entirely out of the groove laterally (to the outside).

What tests are used to evaluate kneecap problems?

X-rays taken in an oblique plain demonstrate exactly where the patella

sits in relation to the femoral trochlear groove. Patellofemoral MRIs can often show exactly how the patella “tracks” in various stages of flexion and extension.

What treatment is available for patellar disorders?

Since the kneecap is often inflamed, non-steroidal anti-inflammatories can be used for a week or two and ice is often prescribed. Strengthening exercises directed at the quadriceps or anterior thigh musculature tend to help the kneecap “track” more physiologically. These can either be done in therapy or at home.

For a true “tracking” problem, a patellar brace may help to keep the kneecap in the center of the femoral groove. McConnell taping, a special tape applied onto the skin, which pulls the kneecap over to the center, is now available. Strengthening exercises can be done with this in place to “retrain” the muscles that affect the patella.

Will I need surgery for my problem?

In over 85% of cases of patellofemoral problems, the treatment is non-surgical, as noted previously. In a small percentage, surgery is required to improve the situation and is either directed at arthroscopically smoothing out the irregular surface of the kneecap, or attempts to “realign” the kneecap so it tracks better in the femoral trochlear

groove to decrease pain from excess pressure and “stabilize” the patella to prevent subluxation or dislocation.

If I have any further questions, who can I call?

Please feel free to call Western Orthopaedics at (303) 321-1333 and ask for a referral to the knee specialist. One of the physicians will be happy to answer your questions and evaluate your knee in the clinic. You may visit us at www.western-ortho.com.

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