

## Patellofemoral Pain Syndrome

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Anterior (patellofemoral) knee pain is one of the most common knee complaints seen by sports medicine professionals. A diagnosis of patellofemoral pain syndrome (PFPS) comprises several different clinical entities, the common hallmark of which are anterior knee pain.

Patellofemoral pain may be due to one (or a combination) of the following reasons: 1) soft tissue abnormalities, such as a muscle imbalance or a tight lateral retinaculum 2) patellar instability with subluxation/dislocation of the kneecap or 3) patellar malalignment, such as an excessive Q angle (the angle between the anterior superior iliac spine (ASIS) and the center of the patella). Each of these may contribute to an excessive lateral pull on the patella, leading to symptomatic wear of the underlying patellar cartilage.

In addition, Chondromalacia of the patella can be a source of anterior knee pain, particularly in young women. It represents softening or fissuring of the cartilage underlying the patella. Certain factors predispose individuals to such a phenomenon, such as a weak VMO, an excessive Q angle, and patella alta (a high-riding kneecap).

Treatment initially consists of specific exercises to strengthen the quadriceps muscle, especially the vastus medialis oblique (VMO), or inner quadriceps. At the same time, stretching and releasing any tight lateral soft tissues is instituted. This is usually achieved with the help of an experienced physical therapist. Other initial treatments may include using an open patellar knee brace or the use of custom orthotics in order to treat any associated biomechanical abnormalities. If unsuccessful, an orthopedic consultation may be sought to determine if further surgical intervention may be required.