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## Anterior Knee Pain

By Matthew DeWall, MD

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Anterior knee pain or pain around the knee cap is a common problem that most athletes will experience at some time or another. There are many causes for pain in this area, but the two most common are patellar tendonitis and patello-femoral pain syndrome.

Patellar tendonitis is also known as “jumper’s knee”. The patellar tendon is the tendon connecting the patella to the tibia or shin bone. The most common area affected by tendonitis is the insertion of this tendon into the patella, and the symptoms are commonly well localized to this area. The tendon becomes inflamed, and this area can be exquisitely tender, and even swollen. Most often this condition occurs with activities requiring jumping and landing, hence the previously mentioned nickname. Treatment of this condition can include a period of rest and stretching, combined with measures to decrease the inflammation such as a course of anti-inflammatory medications and ice. A patellar tendon strap or Chopat strap worn below the patella can provide some support and help to alleviate symptoms as well.

Patello-femoral pain syndrome occurs when there is significant inflammation and irritation between the knee cap and its articulation with the femur or thigh bone. When you bend and straighten your knee, the knee cap runs up and down in a groove on the end of the femur. Normally the undersurface of the knee cap is covered with smooth articular cartilage, and it stays well centered in this groove, which is called the trochlea. Patello-femoral pain can be caused by many activities, but some are known to put high levels of stress on this area can be particularly bothersome. These activities include lunges, deep squats, and stairs, especially going down stairs. The problem can be exacerbated if there is any softening or roughening of the cartilage, known medically as chondromalacia. Furthermore, if the patella does not track centrally within the trochlear groove, the symptoms can worsen.

Treatment of patellofemoral pain centers around reducing inflammation, with the use of ice and anti-inflammatory medications. In severe situations injections of steroids into the joint may be beneficial as well, especially in the older population. Once the inflammation is reduced, the key to preventing recurrence is to build strength within the quadriceps muscle, which is the major

support for the patella. Often, once strength is relatively increased within the quadriceps, patients can then tolerate many of the activities that previously caused pain.

Dr. DeWall specializes in all aspects of knee surgery, including sports medicine, joint replacement and arthroscopic surgery. To reach Dr. DeWall or to schedule an appointment please call 515-224-5223.