

Patellofemoral Syndrome

PRYSTYN M. COVINGTON

Athletic Training; Vanguard College Preparatory School; Waco, TX

Category: High School

Advisor / Mentor: Stuart, Emily (emily_stuart@vanguard.org)

ABSTRACT

CLINICAL PRESENTATION & EXAM: Patellofemoral syndrome is an aching pain at the front of the knee and is common in athletes. Patellofemoral syndrome occurs due to many factors such as overuse (repetitive stress on the knee), trauma to the knee, surgery, and weak muscles. Surgery to the knee using the patellar tendon as a graft to fix the anterior cruciate ligament greatly increases the risk of pain. Many factors play a role in increasing the risk of developing patellofemoral syndrome such as sports, age, and gender. Most people who develop patellofemoral syndrome tend to be adolescents or young adults. Older people can develop patellofemoral syndrome but it is less common. Instead, most older people have knee problems due to arthritis. Sports that include jumping and running such as basketball and track greatly increases the risk of developing the syndrome. Both men and women can develop patellofemoral syndrome but it is more common in females. Common symptoms of patellofemoral syndrome include pain when bending the knee such as squatting. **ANATOMY & PATHOLOGY:** The patellar tendon connects the tibia to the patella. The anterior cruciate ligament is a ligament in the kneecap that crosses the posterior cruciate ligament. The anterior cruciate ligament is located in the middle of the knee and helps to hold the tibia in place. **DIAGNOSTIC TESTING & CONSIDERATIONS:** A physician will start by moving the knee and pushing down on certain areas to eliminate conditions similar to patellofemoral syndrome. After this, a physician will also run other diagnostic tests such as x-rays, CT scans, and an MRI. **TREATMENT & RETURN TO ACTIVITY:** There are both non surgical and surgical treatment options. One can begin with simple treatment options such as resting the knee and avoiding strenuous activities. If that does not work, then a physician may recommend physical therapy. Physical therapy includes icing the knee after exercise/training, taping the knee, braces and rehabilitation. Rehabilitation exercises that correct the movement of the knee are recommended. A physical therapist may recommend a break from sports that involve stress on the knee. If rest and physical therapy do not work, then surgery is recommended. The most common surgeries for patellofemoral syndrome are realignment and arthroscopy. Realignment surgery involves relieving kneecap pressure and/or correcting the angle of the kneecap. Arthroscopy involves inserting an arthroscope through a small incision and removing damaged cartilage.