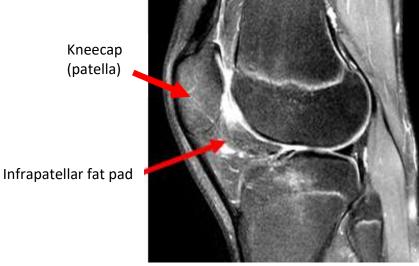
# STEVEN CHUDIK MD

# SHOULDER, KNEE & SPORTS MEDICINE

### Infrapatellar Fat Pad Syndrome (Hoffa's Disease)

Infrapatellar fat pad syndrome is characterized by injury or repetitive trauma to the adipose (fat) cushioning tissue deep to the patellar tendon and below the patella (kneecap) which results in impingement, entrapment or catching of the injured fat pad tissue between patella (kneecap) and the femur (thigh bone) or between the femur (thigh bone) and tibia (leg bone). The fat pad usually serves to protect the deep joint surfaces during kneeling and other direct pressure.



An MRI side view of the knee

#### **Frequent Signs and Symptoms**

- Pain behind the patella, worsened by physical activity, including sports or when completely straightening the knee
- Swelling of the knee (occasionally)
- Tenderness and swelling (occasionally) on either side of the patellar tendon

### **Etiology (Causes)**

Infrapatellar fat pad syndrome is caused by direct injury to the knee or repeated injury to the fat pad during activities that require maximal bending or straightening of the knee. The traumatized fat pad is altered and catches or pinches between the end of the femur and the upper part of the tibia or in the patellofemoral aspect of the joint.



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#### **Risk Factors**

- Sports that require repeated, forceful straightening or bending of the knee (such as kicking or jumping)
- Repeated injuries to the knee
- Sports in which the knee may receive direct injury (volleyball, soccer, football) or those that require prolonged kneeling

#### Prevention

- Maintain appropriate conditioning:
  - Knee flexibility
  - Muscle strength and endurance
- Wear proper padding to reduce direct injury to the fat pad.
- Allow a complete recovery before returning to sports.

#### Outcomes

Physical therapy and possibly corticosteroid injection can result in a full recovery. Some cases require arthroscopic surgery.

#### **Potential Complications**

- Recurrence of symptoms, resulting in chronically inflamed tissue and eventually resulting in a chronic problem
- Disability severe enough to diminish an athlete's competitive ability
- Delayed healing or resolution of symptoms, particularly if activity is resumed too soon
- Risks of surgery, including infection, injury to small nerves (numbness, sensitivity), continued pain and pinching of the fat pad.

#### **Treatment Considerations**

Initial treatment consists of medications and ice to relieve pain and reduce inflammation, stretching and strengthening exercises, and modification of the activity that produces the symptoms. Referral to a physical therapist or athletic trainer may be indicated. Occasionally, Dr. Chudik may recommend a corticosteroid injection to address the inflamed tissue that is repeatedly getting caught. Generally, surgery is reserved for cases in which symptoms persist despite conservative treatment. Surgery usually is performed arthroscopically to remove the inflamed or chronically scarred adipose (fat) tissue. Recovery usually takes 6-12 weeks.



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#### **Possible Medications**

- Nonsteroidal anti-inflammatory medications, such as aspirin and ibuprofen (**DO NOT** take within seven days before surgery), or other minor pain relievers, such as acetaminophen, are often recommended. Take these as directed by your physician. Contact your physician immediately if any bleeding, stomach upset, or signs of an allergic reaction occur.
- Injections of corticosteroids may be given to reduce inflammation, although usually not for acute injuries

#### Modalities (Heat and Cold)

- Cold is used to relieve pain and reduce inflammation. Cold should be applied for 10 to 15 minutes every two to three hours for inflammation and pain and immediately after any activity that aggravates your symptoms. Use ice packs or an ice massage with a cloth between the ice and your skin to prevent burning /freezing your skin.
- Heat may be used before performing stretching and strengthening activities prescribed by your physician, physical therapist, or athletic trainer. Use a heat pack or a warm soak.

## Notify My Office If Symptoms Worsen



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Schedule online now

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