

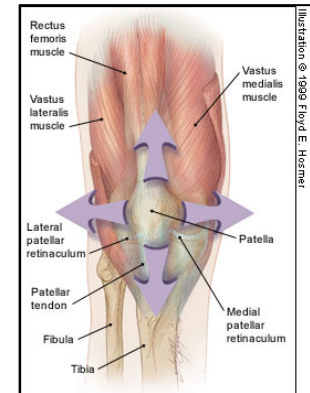


# PATELLOFEMORAL PAIN SYNDROME



## **What is patellofemoral pain syndrome (PFPS)?**

PFPS is characterized by anterior knee pain that develops as a result of the poorly aligned of the patella (kneecap) and/or altered knee and hip joint forces. PFPS can be acute or chronic and is related to prolonged repetitive compressive or shearing forces (running or jumping) of the patella on the femur. PFPS can lead to chondromalacia, which is softening of the cartilage under the patella. It is also called runner's knee.

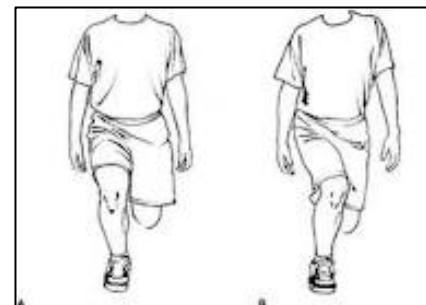


## **Where does it occur?**

The pain or discomfort comes from the contact of the back of the patella on the femur. It can also come from the soft tissues around the knee, such as the iliotibial band. Pain is typically felt with sitting for long periods of time, moving from sitting to standing, squatting, step-downs, and stair negotiation.

## **What are the possible causes?**

- Weakness or muscle imbalance at hip and knee
- Poor joint movement of patella or knee
- Decreased muscle length at hip and knee
- Excessive or late pronation (flattening) of the arch of foot with activity
- Increased genu valgus (knock-kneed) at knee at rest and with activity
- Injury, complete or partial dislocation of patella



**GOOD**

**BAD**

## **How does physical therapy treat it?**

- Strengthening – hip and knee, especially hip abductors and external rotators
- Stabilization/balance/proprioception – proper body alignment
- Manual Therapy – massage, stretch, mobilization
- Stretching – iliotibial band
- Taping or foot orthotics
- Modalities – electrical stimulation, ultrasound, cold laser



© Mayo Foundation for Medical Education and Research. All rights reserved.