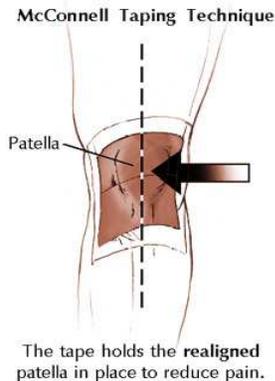


Treatment

Physiotherapy may include:

- Taping of the patella to improve patellar movement and alignment



- Manual therapy to stretch tight tissues and to mobilize stiff joints
- Teaching exercises to stretch tight muscles and strengthen weak muscles throughout the lower body that may be affecting patellar alignment.
- Education regarding management of pain, causes of pain and dysfunction, and safe return to normal work and recreational activities.

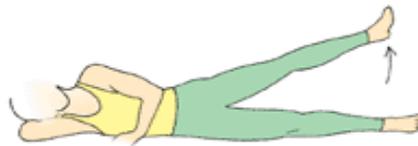
Some exercise examples are:



Step-up



Wall squat with ball



Side-lying leg lift

For treatment of your Patellofemoral Pain,

CALL OR VISIT US AT:
www.expertphysio.ca

**Burnaby Heights
Physiotherapy Clinic
210-3970 E Hastings
604-294-3911**

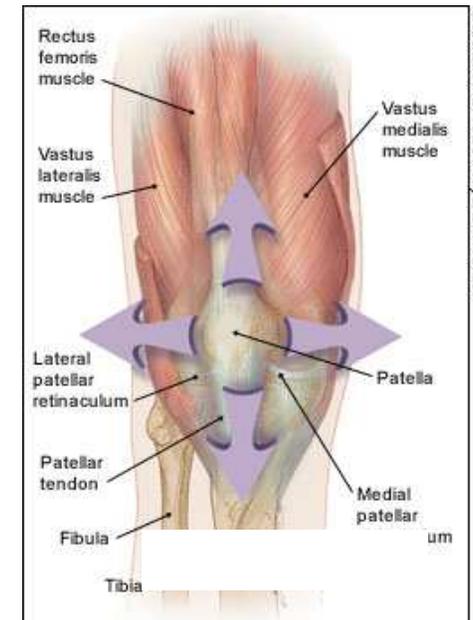


**Eight Rinks
Physiotherapy Clinic
1-6501 Sprott St.
604-294-3376**

Our Mission Statement:

Our Expert services are committed and caring. We continue to excel in serving generations of the Burnaby Community.

Patellofemoral (Kneecap) Pain:



Physiotherapists
Your Body Specialists

What is Patellofemoral pain?

Patellofemoral pain is felt primarily under or around the knee cap. It is usually aggravated by descending or climbing stairs, squatting, kneeling, running or after prolonged sitting. The pain may be sharp and/or achy.

Knee Anatomy

Patellofemoral refers to the joint between the kneecap (patella) and the thigh bone (femur). The patella and its attachments act like a pulley to help the strong quadricep muscles on the front of the thigh control knee movement (see Figure A on the front of this brochure).

The patella is only loosely held in contact with a shallow femoral groove in order to allow gliding movements as the knee flexes and extends. How the patella moves or “tracks” in its groove is determined by many structures (see Figure A). In essence, your patella is like a train, and it can become derailed.

Why does it hurt?

If your patella is not sliding evenly over the surface of the femoral groove, the cartilage underneath it can become irritated. The term Chondromalacia Patella refers to a softening of the cartilage, which can lead to degeneration and even fissuring in more extreme cases.

What are the causes of patellofemoral pain?

An injury or trauma to the knee, such as a sprain, strain, fracture, or surgery, can cause the muscles around the knee to become imbalanced. The inner quadricep muscle (Vastus Medialis) is often the first muscle to atrophy.

Other lower quadrant muscles such as the hamstrings, calf muscles and hip and buttock muscles can tighten or become weak over time, causing the position and movement of the patella to change. Abnormal stresses are created.

Tightness in the Iliotibial band on the outside of the thigh can alter patellar tracking.

Malalignment issues from the back, pelvis, hip, legs, and feet may alter patellar tracking. As you can see in Figure 1 below, the position of your leg bones, and your feet, can cause a rotation of your leg bones and alter patellar tracking.

Figure: Courtesy of Elizabeth Arendt, MD

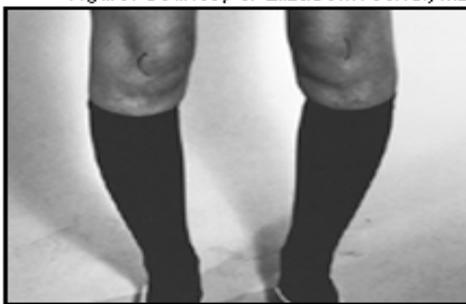


Figure 1. Standing leg alignment of a young woman with severe “miserable malalignment syndrome” demonstrates increased femoral anteversion that produces the following posture characteristics: increased internal rotation of the hip, high Q angle, tibia vara, external tibial torsion, and pronated flat feet.

How Physiotherapy can help

Physiotherapists are movement and rehabilitation specialists. They are specifically trained to assess the possible causes of patellofemoral pain, and to provide appropriate treatment. Physiotherapy assessment may include:

- Evaluation of your history and symptoms
- Assessment of the stability, alignment, movement, strength and muscle balance of your low back, pelvis, hips, knees, and feet, with particular attention to how the patellofemoral joint is influenced by these components
- Assessment of the position of the patella in its groove, and patellofemoral joint glides in all directions
- Palpation of the patellofemoral joint, including the underside of the patella and surrounding soft tissue
- Evaluation of the ligaments and cartilage of the entire knee joint complex