Dr Doron Sher

MB.BS. MBiomedE, FRACS(Orth)

Knee, Shoulder, Elbow Surgery

ORTHOSPORTS

PATELLOFEMORAL PAIN

(Pain behind the kneecap)

ANATOMY

The patellofemoral joint is a specific part of the knee joint composed of the patella (kneecap) and the femur (thigh bone).The quadriceps tendon inserts into the patella at the top and the patella tendon runs from the bottom of the patella to the tibia. The patella moves in a groove in the femur called the femoral groove. The patella and femoral groove are lined by articular cartilage, the smooth lining of the surfaces of joints.

Pain from the patellofemoral joint is a very common cause of knee pain in all ages. It can occur for no apparent reason or can result from a specific injury such as a direct blow or twisting injury. Pain can be resistant to all forms of treatment and can recur many years following initial presentation.

Particular problems include…

- The patella slipping out of joint (dislocation).
- Partially slipping out of joint (subluxation).
- Maltracking - meaning it does not move in the groove as it should. This leads to abnormal stresses and results in pain in the area.
- Fracture (breaking the bone).
- Arthritis.
- Patella tendonitis - this is inflammation of the tendon beneath the patella.

Symptoms include…

- Anterior (front) knee pain usually worse going up and down stairs or prolonged periods of sitting, or squatting.
- Clicking or grinding within the knee.
- Locking or the feeling that the knee cannot move.
- Giving way.
- Swelling.

MALTRACKING

The kneecap does not always move in the groove as it should. Abnormal sliding is known as maltracking and this can cause pain. This can often be the result of a high or small patella, abnormal alignment of the leg, tight structures on the outer aspect of the knee or weak structures on the inner aspect. The surrounding muscles are vital to the normal tracking of the patella and weakness in one or over tightening of another can lead to abnormal tracking. It is for this reason that physiotherapy plays such a vital role in the treatment of this disorder.

DIAGNOSIS

Is based on history and examination and assisted by investigations.

Examination includes looking at the overall alignment of the limb, assessing tracking and position of the patella, feeling for areas of tenderness, tightness of soft tissue structures and strength of muscles.

Investigations include Xrays as well as MRI or CT scans .These can help look for any maltracking and damage to the joint surfaces.

TREATMENT

Mostly treatment is non operative and is based around re-establishing the normal tracking of the patella within its groove.

Physiotherapy plays a vital role in this assisting with:

- Relief of acute pain.
- Muscle strengthening exercises (especially the quadricep muscles).
- Hamstring and Iliotibial band stretching.
- Taping.

Occasionally surgery can be helpful if conservative management has failed. It is especially useful if there is mechanical catching or locking within the knee.

SURGERY

Surgery options include...

- Arthroscopy to debride any cartilage flaps.
- Lateral release which releases tight structures on the lateral aspect of the patella to help with tracking. This is done arthroscopically.
- Extensive realignment procedure which involves a larger incision and redirecting muscle and ligaments to improve the tracking of the patella.
- Patellofemoral replacement.

These procedures have a reasonable chance of success in the right patient but should only be attempted after conservative treatment has failed.

Results are not as predictable as with other procedures on the knee and surgery may not be successful in some cases.

May 2004

D. SHER knee shoulder and elbow surgery | J.GOLDBERG shoulder surgery
P. WALKER knee & hip surgery | C. WALLER hip & knee surgery | R.PATTINSON paediatric & general
A.LOEFLER hip, knee & spines | J.NEGRINE foot & ankle surgery | I. POPOFF shoulder, elbow and knee
A.TURNBULL hip & knee surgery | W.BRUCE hip & knee surgery | S.MYERS hand & wrist surgery

160 Belmore Road, Randwick 2031 Phone 93995333 Fax 93988673
47-49 Burwood Road, Concord 2137 Phone 97442666 Fax 97443706
1st Floor Easts Tower, 9 Bronte Road Bondi Junction Phone 93892766
www.orthosports.com.au