#### PATELLA TENDINOPATHY

Patellar tendinopathy is a common sport related injury. It is most common in jumping and running sports. Patella Tendonitis is now curable. There are no inflammatory cells and no increase in prostaglandins can be detected in the tendons. <u>Histopathological studies</u> of the tissue fibrils affected by tendinopathy characteristically demonstrate hypercellularity, hypervascularity, lack of inflammatory infiltrates, and disorganisation and loosening of collagen fibres. There is no evidence that impingement is the cause of the tendonopathy.

Most doctors will recommend conservative measures to try and control symptoms:

- Stopping the activity that caused the injury (rest)
- Ice or cold therapy
- Cross training and Eccentric training (activities that do not cause pain)
- Simple analgesia or non-steroidal anti-inflammatory
- Physiotherapy and <u>patella supports</u>
- Patella Taping or <u>Procare Surround Patella Strap</u>
- <u>Lithotripsy</u>
- Prolotherapy

As the pain in chronic patellar tendinopathy is not inflammatory in nature and does not involve collagen damage of the tendon, conservative therapy should be shifted from anti-inflammatory strategies towards a complete rehabilitation with eccentric tendon strengthening as a key element. <u>Prolotherapy</u> has no rationale and can cause <u>unacceptable</u> <u>scarring</u>. Essentially it worsens the hypercellularity and hypervascularity and so plays no part in the modern management of patella tendonopathy.

There are a number of different surgical procedures for this condition. The new procedure of arthroscopic confluence coblation when performed properly appears to have a high rate of success in chronic tendonitis. Therefore, your surgeon should be able to offer a better than 90% chance of improvement with the least risk of complications. Surgical options include:

- Open tendon decompression
- Tendon decompression and excision of mucoid degenerative tissue
- Tendon decompression and radiofrequency vapourisation of the mucoid degeneration (topaz)
- Arthroscopic decompression of the retropatella fat pad
- Arthroscopic Infrapatella Pole Surgery
- <u>Arthroscopic Confluence Coblation</u>

If you have any other questions please do not hesitate to ask your Orthopaedic and Trauma surgeon.

# Anteríor Knee Paín

Further copies of this brochure can be found at WWW.JOhnHardy.co.uk Phone 0044 (0)117 3171793 Fax 0044 (0)117 973 8678 Copyright ICD(UK)LTD 2007

## ANTERIOR KNEE PAIN

This is an umbrella term used when a diagnosis has not been properly made. Anterior knee pain can be due to local pathology or distant pathology causing referred pain.

Common causes of referred pain to the knee include irritation of the third lumbar nerve root from the back and hip pathology. The symptoms of this are often generalised pain over the knee and difficult to pin point.

Local pathology causing pain is often easy to pinpoint by the patient.

#### PATELLA BURSITIS

Prepatella and infrapatella bursitis is a common cause of pain in front of the knee. It can be sterile or infected. If infected it is often red hot swollen and tender. If not it is painful and tender but not always swollen. Sterile prepatella bursitis may be due to gout.



The doctor will check your knee for redness, swelling, temperature and tenderness. Your feet should be

checked for infection, your groins to see if you have enlarged glands and your temperature and pulse to see if you are unwell. Occasionally, blood tests will be performed to exclude gout. Depending on the cause of the bursitis your doctor can treat the cause and the bursitis should get better. If you work on your knees protect them with knee supports or pads. It is rare that surgery is indicated for bursitis.

#### PLICA SYNDROME

A plica is a normal fold in the lining of the knee joint. They tend to support the patella and evenly distribute load around the articular cartilage of the patellofemoral



joint.

There are four plicae around the patella (knee cap). Each can cause pain. The symptoms are pain that can be pinpointed often to the plica that is causing impingement. Depending on whether the plica is continuously or intermittently being trapped the symptoms of a sharp pain are continuous or intermittent. If there is wearing of the cartilage in front of or behind the plica that is being trapped then the patient experiences crepitus (cracking when getting out of a chair or climbing sta

irs). The treatment, if there has been no wear of the patella or trochlea cartilage, is simple anti-inflammatory pain killers, physiotherapy and trials of patella taping or patellofemoral knee braces.

### HOFFA'S DISEASE

Impingement of portions of the infrapatellar fat pad between the patellofemoral and tibiofemoral articular surfaces is a frequent cause of anterior knee pain (Hoffa's Disease). There are four structures that can become involved in the impingement process. These are the superior aspect of the fat pad blending into the medial or lateral plica, the inferomedial and inferolateral tongues of the fat pad and a torn infrapatella plica. The patient typically complains of knee pain below and behind the knee cap. The pain is often intermittent at first. It is often worse going down stairs.



Wear from the scarred superior folds of the fat pad (green arrow) occurs on the back of the normal patella cartilage (pink arrow) This wear is called chondromalacia patellae (red arrow) or on the anterior surface of the femoral trochlea (blue arrow). It rarely wears both surfaces at the same

time initially though as the impingement advances the wear will affect both surfaces.

Impingement is divided into acute and chronic phases. Acute is less that 6 weeks of pain and chronic is longer. The treatment of the acute phase, if there has been no wear of the patella or trochlea cartilage, is simple antiinflammatory pain killers, physiotherapy and trials of patella taping or patellofemoral knee braces. The treatment of chronic impingement is day case arthroscopic careful resection of the scarred fat pad causing the impingement and occasionally chondroplasty of the damaged surface of the joint.

#### Appointments 0044 (0)117 3171793