

KNEE INJURIES

IDENTIFICATION AND TREATMENT

Patella Fat Pad/ Patella Bursitis

Patella Fat Pad

- Two fat pads of the knee: infrapatella (below knee cap) and separately (above knee cap)
- Injured by chronic kneeling or direct blow
- Characterized by swelling and point tenderness

Bursitis

- Bursitis in the knee can be acute, chronic, or recurrent
- Characterized by redness, swelling (can be water balloon-like) and possible loss of motion

Treatment

- Ice for pain management and inflammation
- Pressure wrap for chronic swelling
- Pressure wrap and donut pad for acute balloon-like swelling
- Reduction of aggravating activities
- Possible use of over the counter anti-inflammatory medications

Patella Tendonitis/ Quadriceps Tendonitis

Patella Tendonitis (Jumpers Knee)

- Caused by repetitive forceful extension of the knee
- Pain and tenderness along patella tendon
- Swelling and loss of range of motion common with crepitus (grinding)

Treatment

- Local ice massage
- Begin therapeutic exercise program as dictated by athletic trainer

Quadriceps Tendonitis (Kickers Knee)

- Caused by repetitive forceful extension of the knee
- Pain and tenderness along quadriceps tendon
- Swelling and loss of range of motion common with crepitus (grinding)

Treatment

- Local ice massage
- Begin therapeutic exercise program as dictated by athletic trainer



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Chondromalacia Patella

- Chondromalacia patella is a softening and deformation of the articular cartilage on the back of the patella
- Common mechanics is repeated direct trauma to the patella as is recurrent subluxation, or and normal patella tracking
- Pain under patella upon flexion and extension of the knee
- Pain when walking up and down stairs
- Characterized by temporary loss of function, swelling, and sub-patella crepititious on active movement

Three Stages are Common:

1. Swelling and softening of articular cartilage
2. Fissuring of the softened articular cartilage
3. Deformation of the surface of the articular cartilage, caused by fragmentation

Treatment

- Standard anti-inflammatory measures, (ice, OTC anti-inflammatory medications)
- Therapeutic exercise to strengthen the medial knee muscles
- Stretching of surrounding muscles and tissue

Osgood-Schlatter & Larsen-Johansson

Osgood-Schlatter

- Avulsion (tearing away) fracture of the tibial tubercle
- Common in athletes prior to 18 or 19 years old
- Characterized by severe pain when kneeling, jumping and running
- Point tenderness over anterior proximal tibial tubercle

Treatment

- Local ice massage
- Begin therapeutic exercise program as dictated by athletic trainer

Larsen-Johansson

- Avulsion (tearing away) fracture of the inferior pole of the patella
- Caused by overuse of the patella tendon
- Pain on kneeling or activity
- Tenderness on inferior pole of the patella

Treatment

- Local ice massage
- Begin therapeutic exercise program as dictated by athletic trainer

Patella-Femoral Dysfunction

- Patella femoral pain develops gradually over time and is characterized by a diffuse ache in the area of the patella
- Common symptoms include pain with stairs, prolonged sitting, grinding, swelling and occasional locking or catching
- Caused by a variety of factors: insufficient vastusmedialis obliquus (VMO) in combination with tight lateral and/or posterior structures

Treatment

- Stretch frequently, as instructed by athletic trainer
- Ice