Medial Plica Syndrome
What is Medial Plica Syndrome?

• It is a congenital disorder in which the thin wall of fibrous tissue extends from the synovial capsule of the knee.
  – Pain usually occurs when the synovial capsule becomes inflamed.

• It is usually associated with palpation on the medial patellofemoral joint.
Causes
• Plain radiography is necessary to exclude other causes of knee pain
  – May not provide further assistance in diagnosing plica syndrome
• Plica Syndrome is often associated with anterior knee pain
Patient population affected by Medial Plica Syndrome:

• Patients typically complain of pain over the region of the medial femoral condyle
  – Pain is brought on by bouts of activity
  – Pain also occurs after sitting for prolonged periods
Diagnosis
• The following set of criteria is used for proper diagnosis:
  – History of symptoms
  – Failure of inoperative intervention
  – Arthroscopic finding of plica that impinges on the medial femoral condyle during flexion of the knee
  – No other abnormality in the knee that would explain the symptoms
Symptoms
• Snapping sensation is commonly reported as the plica sweeps over the femoral condyle
• Symptoms are dependent on the location of the plica
  – If plica is connecting the patella to the femoral condyle, the symptoms can mimic those of Patellofemoral Pain Syndrome.
Clinical Presentation

- Intermittent swelling
- Locking
- Weakness
- Stiffness
- Clicking
- Catching
Examination Findings
• Tenderness over the medial femoral condyle
• Effusion
• Crepitus
• Loss of motion
• Quadriceps atrophy
• Positive McMurray’s test
• Positive Hughston’s test
McMurray’s Test

• The patient is placed in a supine position with the knee stabilized.
• The therapist rotates the tibia and then extends the knee while applying a varus or valgus load.
• A positive test is noted by a painful click or pop during mid-extension indicating a meniscal tear.
Hughston’s Test

• This is a special test performed to differentiate between Patellofemoral Pain Syndrome and Plica Syndrome.
• A positive finding is noted as a knee jerk indicating presence of Plica Syndrome.
Hughston’s Test

- The patient should be examined in supine with the hip flexed at 45 degrees, knee flexed at 90 degrees, and the leg in internal rotation. The therapist grasps the foot and applies internal rotation while applying a valgus stress to the upper end of the leg.
Goals of Treatment

• Reduced pain levels
• Reduced inflammation
• Improved range of motion
• Return patient to normal activities without risking further injury
Non-operative Treatment
Physical Therapy

• Strengthening exercises
  – Focus on Isometrics

• Stretching exercises
  – Focus on Quadriceps, Hamstrings, Gastrocnemius
Modalities

• RICE Therapy (Rice, Ice, Compression, Elevation)
  – Used to reduce pain and inflammation in the knee
• Cryotherapy
• Ultrasound
• Patellar Bracing
Pharmacology

• Ant-inflammatory medications
  – Used to reduce pain and inflammation

• Non-steroidal anti-inflammatory medications
  – Used to reduce pain and inflammation

• Corticosteroid injections
  – Used to reduce pain and inflammation
Operative Treatment
Arthroscopic surgery

- Arthroscopy of the knee is the most commonly performed surgical procedure in the United States.
- This procedure is used for the removal of pathologic plica if conservative treatment fails.
What is the Outcome of Treatment?

- Refer to orthopedic surgeon if condition is severe enough to require surgery
- **Physical therapy**
  - Improve lower extremity strength
  - Improve lower extremity flexibility
- **Prognosis: Good**
Resources

- Lazoff, Marie. First Consult. Elseiver Inc. Copyright © 2011