

Case Studies

Listen

Process

Conclude

Chief Complaint

- 16 year old male with R Knee Pain

History

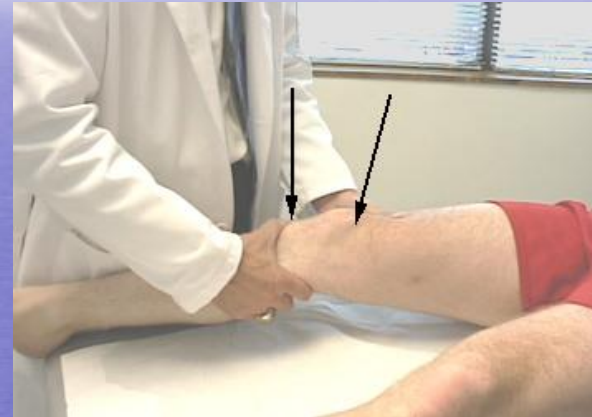
- “I was playing football Friday night. I went out for a play as one of two eligible receivers. I was pretty much alone down the field. I turned to catch the ball, and my right leg stayed still while my body twisted. I am not sure if I felt a pop, but before I was taken to the sidelines, my knee was huge. I did not return to play.”

Physical Exam

- Inspection
 - Moderate joint effusion, antalgic gait, favoring the R leg. Prefers to hold the leg at 5 to 10 degrees flexion
- Palpation
 - Generalized tenderness
 - No specific areas of tenderness
- ROM
 - 5 to 135 degrees

Physical Exam (Cont.)

- Special tests
 - Lachmans – soft end point
 - Anterior Drawer – increased translation



Investigations

- X-rays
 - Rule out bony abnormality

Differential Diagnosis

- ACL tear

WHY?

- History
 - Non-contact injury
 - Twisting mechanism
 - Immediate effusion
 - Unable to return to play

WHY?

- Physical Exam
 - Antalgic gait
 - Position of comfort
 - Effusion
 - Positive lachmans
 - Positive anterior drawer

Differential Diagnosis

- Meniscus tear

WHY NOT?

- History
 - Immediate Effusion not delayed
- Physical Exam
 - Negative Flexion Pinch
 - No specific tenderness to palpation
 - posterior joint line tenderness

Differential Diagnosis

- Patellar Subluxation

WHY NOT?

- History
 - Immediate effusion
- Physical Exam
 - No specific tenderness
 - Medial Patellar Femoral Ligament (MPFL)

Treatment Algorithm

- Discuss diagnosis
- Decide on MRI
- PT
 - Establish ROM to full
 - Decrease effusion
- Treatment options
- Referral to Orthopedics/Sports Medicine

Chief Complaint

- 56 year old female with L Shoulder Pain

History

- “I have aching pain in my left shoulder that has been getting worse over the last several months. It is waking me up at night, every night, when I roll over on it. I have difficulty hooking my bra and doing my hair. I haven’t had an injury that I am aware of.”

Physical Examination

- Inspection
 - No obvious deformity
- Palpation
 - No specific tenderness
- ROM
 - Forward elevation to 170 degrees with pain at the end of the arc of motion
 - Abduction to 170 degrees with pain at the end

Physical Examination (Cont.)

- ROM
 - Painless External Rotation at the side to 45 degrees
 - Internal Rotation to L5, 5 vertebral bodies less than the contralateral side
 - AROM and PROM equal
- Strength
 - Deltoid 5/5
 - Subscapularis 5/5
 - Infraspinatus and Teres 5/5
 - Subraspinatus 5/5
 - All with mild pain, no weakness

Physical Exam (Cont.)

- Special Tests
 - Positive Hawkins



Positive Neer



Negative Apprehension



Negative Obriens



Differential Diagnosis

- Rotator Cuff Tendinitis

WHY?

- History
 - Atraumatic
 - Night time pain
- Physical Examination
 - No loss of ROM, but pain with extremes of ROM
 - No weakness with manual muscle strength testing
 - Negative special tests

Differential Diagnosis

- Rotator Cuff Tear

WHY NOT?

- History
 - Atraumatic
 - No complaints of weakness
- Physical Examination
 - Full active ROM
 - No weakness with manual muscle strength testing

Differential Diagnosis

- SLAP tear

WHY NOT?

- History
 - Atraumatic
- Physical Examination
 - Negative Obriens

Differential Diagnosis

- Adhesive Capsulitis (Frozen Shoulder)

WHY NOT?

- AROM = PROM

Treatment Algorithm

- Physical Therapy
 - ROM
 - Periscapular strengthening
- NSAIDS
- If no improvement
 - Possible steroid injection
- Possible MRI

Chief Complaint

- 21 year old with low back pain

History

- “I am in my senior year in college. I am on the gymnastics team. I have been having low back pain that has recently kept me from being able to practice and compete to my highest level. The pain doesn’t radiate anywhere, and is aching most of the time with periods of sharp discomfort. There was no one injury I am aware of.”

Physical Examination

- Inspection
 - No obvious deformity
- Palpation
 - No bony tenderness
- ROM
 - Some pain with flexion and extension, no significant loss of ROM
 - Full ROM with lateral bending
 - Full ROM with rotation

Physical Examination

- Strength and Neurologic status
 - 5/5 Quad and hamstring strength
 - 5/5 Tibialis anterior and gastroc
 - Able to heel and toe walk
 - Normal gross sensation to LE

Physical Examination

- Special Tests

Negative Straight leg raise



Pain With Resisted Hip Extension



Investigations

- X-rays
 - AP, Lat, Flexion, Extension, Oblique
- Bone Scan

Differential Diagnosis

- Spondylolysis

WHY?

- History
 - Gymnast
 - LBP
 - Atraumatic
 - Nonradicular

WHY (Cont.)

- Physical Examination
 - No bony tenderness
 - No loss of ROM
 - No neurologic deficits
 - Strength Intact
 - Pain with resisted hip extension
 - Negative SLR

Differential Diagnosis

- Neurogenic Back Pain

WHY NOT?

- History
 - Age
 - Nonradicular pain
- Physical Exam
 - Negative SLR
 - Neurologically intact
 - No muscle weakness

Match Game

- Common findings and their diagnoses

Shoulder Pain

.....with radiation down arm

C-Spine Disease

Positive Spurlings

Numbness and Tingling In Thumb Index and long fingers

Worsening nighttime symptoms
Better with shaking out the hand

Carpal Tunnel Syndrome

EMG

Splints

Send for injection or surgery

Unable to Actively Extend Finger at DIP

Passive Extension OK
Minor Trauma

Mallet Finger

Splint for 6 Weeks

X-ray to rule out boney mallet

Calf Pain

30-40 yr old weekend warrior
Pop, positive Thompson's Test

Achilles Tear

Refer for management

Shoulder Pain Hockey Player

History of being checked into the
boards

Palpable step off at ac joint

AC Seperation

X-rays bilateral AC joints
Conservative management

Hip Pain

Painful catching and giving way

Labral Tear

Painful – Key word

Anterior Knee Pain

Atraumatic
15 year old girl

Patella-Femoral Malalignment

See on sunrise view

PT, PT, PT

Knee “Swelling”

Trauma to anterior knee

No joint effusion

Pre-Patellar Bursitis

No joint effusion

63 Year old with knee pain

Atraumatic, worsening with a
painful clicking sensation

Osteoarthritis

May have degenerative meniscus
tear, treat as OA

12 Year old male with anterior
knee pain

Tibial tubercle prominence

Osgood – Schlatter Disease

Stretch Stretch Stretch
Cylinder cast?

• *Thank you*