

1  **Lower Extremity Injuries****The History**

- How, When and Where ?
- Swelling?
- Ability to Ambulate?
- Did you hear or feel a Pop?
- Did you Relocate an Injured part?

2  **Lower Extremity Injuries****The Physical Examination**

- Have the patient demonstrate the area of maximal tenderness
- Use one finger to localize tenderness
- Is the tenderness located over the bone or the soft tissues?

3  **Knee Anatomy**4  **Injury Terms:**

Sprain vs Strain

5  **Sprains**Severity:

- Grade I - min. structural disruption
- Grade II - partial disruption
- Grade III - complete disruption

6  **Physcal Fracture Patterns**7  **Knee Ligaments in Children**8  **Knee Ligaments in Children**9  **Knee Examination**

- Always examine the hip when examining the knee
- Obligatory External Rotation with Hip Flexion is an important sign of potential hip pathology
- Hip pain is often referred to the anterior thigh or knee

10  **Slipped Capital Femoral Epiphysis**

- Obligatory External Rotation with Hip Flexion

11  **Physical Exam**

- Deformity
- Swelling
- Tenderness
- Mobility
- Stability

12  **Physical Exam**

- Lachman Test for ACL and PCL
- Anterior and Posterior Drawer

13  **MRI**

- Menisci
- Ligaments
- Tumor

14  **Physical Exam**




















- Assess Medial and Lateral Stability

15  **Physical Exam**

- Palpate the Joint Lines for Tenderness --Meniscal Pathology

16  **Meniscal Tears**

- Rarely Before 12
- Occasionally Isolated
- Unusual to be Minor Trauma
- Consider Discoid

- Often Hemarthrosis
- May be Repairable!
- 17  **Torn Lateral Meniscus**
- 18  **Physical Exam**
 - Patellar Apprehension
- 19  **Radiographs: Merchant view**
- 20  **Patellar Dislocation**
- 21  **Patellofemoral Articulation**
- 22  **Patellofemoral Articulation**
- 23  **Patellofemoral Articulation**
- 24  **Patellofemoral Articulation**
- 25  **Physical Exam: Stability**
 -
 -
- 26  **Common Injury Patterns**
 - Anterior Talo-fib
 - Calc- fib
 - Posterior talo-fib
 - Deltoid
 - Anterior tib-fib / Interosseus
 - Maisonneuve
 -
- 27 
- 28 
- 29  **Ankle Sprains**
 - Extremely Common
 - Frequency in Basketball: 70%
 - Severe Grade: 32%
 - Recurrence: 80%
 - Rehab / Prevention
 -
- 30  **Hamstring Strains**
 - Grades
- 31  **Strain vs. Avulsion Fracture**
 - Rehab
 - Education
- 32  **Quadriceps Contusion**
 - Bruise
 - Grades
 - ROM
 - Return
 - Re-bleed
 - H.O.
- 33  **Pelvic Avulsion Fractures**
- 34  **Physeal Fracture of the Fibula**
 - Sprain vs fracture
 - Weak link in the chain
 - Clinical diagnosis !
 - Radiographic “confirmation”
- 35  **Physeal Injury**

- Mild to moderate swelling
- Minimal or no ecchymosis
- Refusal to weightbear
- *Tenderness directly over physis*
- Treatment

36  **Tillaux Fracture**

37  **Fifth Metatarsal Fracture**

- Usually forced inversion injury
- Minimal findings but patient almost always refuses to weightbear on affected bone
- Jones vs Styloid

38  **Lisfranc Injury**

39  **Lisfranc Injury**

- u Mechanisms:
 - » longitudinal
 - » twist
 - » bend
- u Treatment:
 - » Identify or suspect !
 - » Splint, Ice, Elevate,
 - » Early referral to
 - » Ortho for ORIF