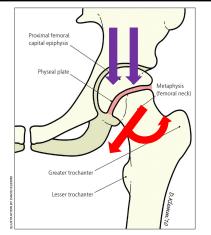


SLIPPED CAPITAL FEMORAL EPIPHYSIS



PATHOPHYSIOLOGY



Increased load on the proximal femoral physis causes **anterior** translation and **external** rotation of the metaphysis in an at-risk patient

PRESENTATION

Presentation

- Painful limp
- Pain may localize to the groin, thigh, ipsilateral knee or hip (posterior or lateral side)

Epidemiology

- Children ages 8-16
- M:F; 2:1.4

Risk Factors

- Obesity, endocrine disorders
- Adolescent growth spurt

PHYSICAL EXAM

<u>MSK Exam</u>

- Limited active internal rotation on affected side
- Passive internal rotation may elicit pain
- Loss of hip flexion, abduction, and internal rotation
- Antalgic gait

Drehmann Sign

 With passive flexion of the hip to 90 degrees, external rotation occurs

DIAGNOSIS & RADIOGRAPHY

Radiography (Lateral View)

- U Widening of the physis (A)
- Decreased epiphyseal height compared to contralateral side (B)
- Loss of anterior concavity of the head-neck junction
- Note the medial and posterior displacement of the physis relative to the metaphysis

<u>Diagnosis</u>

- Suspect SCFE Dx with characteristic painful limp
- Diagnosis is made with plain film x-rays (AP and lateral 'frog leg' views)

MANAGEMENT

- Ensure patient uses a wheelchair or weight bearing crutches prior to orthopedic evaluation
- Definitive treatment: Surgical fixation
- Goal of surgery: Stabilize epiphysis and promote early closure of the growth plate via percutaneous screw fixation



COMPLICATIONS

- Long-term degenerative osteoarthritis
- Avascular necrosis of the femoral head
- Chondrolysis
- Limb length discrepancy

July, 2021

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