Red Flags in Hip and Knee Symptoms

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Classification

Acute:  Traumatic
        Atraumatic

Chronic: Insidious onset
        Rapidly Progressive
Hip Anatomy

Hip Joint

- Lunate surface of acetabulum
- Articular cartilage
- Head of femur
- Zona orbicularis
- Iliofemoral ligament (cut)
- Anterior inferior iliac spine
- Acetabular labrum
- Fat in acetabular fossa
- Transverse acetabular ligament
- Pubofemoral ligament (cut)
- Obturator artery
- Obturator membrane

*ligamentum teres*: relaxed during adduction - of little importance in adults

Superficial trochanteric bursa

Deep trochanteric bursa

Gluteus medius muscle
Knee Anatomy
Acute Traumatic: Knee

Twisting
Direct Blow
High energy injury

Effusion
Joint Line Tenderness
Reduced joint motion
Acute Traumatic: Knee

Meniscal Tear
Ligament Injury (ACL)
Chondral Injury
Bone Bruising
Fracture
Tendinous

(Associated nerve / vessel damage)
Knee Meniscal Tear

Twisting injury
Ligament Injuries

MCL / LCL / PCL / PLC – twisting injuries / blow
ACL very common
Knee Chondral

Acute twisting Blow
Associated Injury
Bone Bruising

Associated with meniscal, ligament injuries
Severe symptoms
Radiographs normal
Fracture

Tibial Plateau
Patellar Tendon Rupture

Ruptured Patellar Tendon with Surgical Repair

Pre-operative Condition

Surgery

Post-operative Condition
Acute – Atraumatic Knee

Short duration of symptoms
Flare up of chronic problem
Degenerate meniscal / chondral problem
Infective
Inflammatory – gout / pseudogout
Knee Inflammatory

Gout – high uric acid leading to crystal deposition (age, obesity, alcohol)
Pseudogout – calcium pyrophosphate deposition
Knee Infective

Relatively common
Effusion
Motion
Aspirate
Chondrolysis
Chronic – Insidious (Knee)

Gradual worsening of symptoms over time
Pain
Disability
Instability
Motion
Loss of function
Chronic – Insidious (Knee)

Meniscal
Chondral
Degenerative
Ligamentous
Inflammatory
Tendinous
Knee Arthritis

Degeneration of articular cartilage
Progressive loss of function
Deformity
Chronic – Rapid (Knee)

Bone Pain
Short duration, severe symptoms
Bone Pain
Mass
Malignancy
Joint Degeneration
Avascular Necrosis
Knee AVN

Idiopathic
Steroids
Alcohol
Reduced blood supply
Malignancy

Bone Pain
No signs
Rapid onset
Mass
Acute Traumatic Hip

Twisting injury
Direct blow
Fall
High energy injury

Pain
Inability to weight bear
Reduced motion
Acute Traumatic Hip

Fracture
Labral tear
Chondral injury
Musculotendinous
Hip Fracture

Sudden Pain
Inability to walk
Usually in the elderly
Stress Fracture

Overuse (runners)
Vitamin D deficient
Pain after activity
Gradually increases
Labral Tear

Groin pain
Squatting, running, deep flexion
Due to FAI
Chondral

Usually associated with FAI
Acute injury
Degenerate
Musculotendinous

Acute Groin strains common (Adductors)
Rectus Femoris Avulsion
Hamstring Avulsion
Acute – Atraumatic Hip

Short duration of symptoms
Flare up of chronic problem
Degenerate labral / chondral problem
Infective
Inflammatory
Hip Inflammatory

Rheumatoid
Gout
Psoriatic Arthritis
Juvenile Arthritis
AS
Hip Infective

Usually very short duration

Very irritable hip

Unable to weight bear

Age range

IVDU

Systemically unwell
Chronic – Insidious (hip)

Gradual worsening of symptoms over time

Pain

Disability

Motion

Loss of function
Chronic – Insidious (Hip)

Labral
Chondral
Degenerative
Inflammatory
Musculotendinous
Hip Osteoarthritis

Breakdown of articular cartilage
Exposed bone
Chronic – Rapid (Hip)

Bone Pain

Short duration, severe symptoms

Bone Pain

Mass

Malignancy

Joint Degeneration

Avascular Necrosis
Hip Avascular Necrosis

Disrupted blood supply
Death of osteocytes
Secondary OA
Can treat early phase
Idiopathic
Alcohol
Steroids
Chemotherapy
Hip Malignancy

Rich blood supply
Common site for secondaries
Bone pain, ref to knee
Summary

Clinical Assessment Essential

Refer for Investigations if unsure

Hip and Knee common site of primary and secondary disease

Beware of symptoms out of keeping with clinical signs