Arthritis or OA of the hip joint

Interpretation of radiographs

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Early osteoarthritis (OA) - right hip

- Marginal/synovial osteophytes
- Localised joint space narrowing
- Commonly observed unilaterally

67-year-old male: Pain left hip and lumbar spine
Pistol grip – CAM deformity on AP radiographs

Assessment only on internally rotated images
Diagnosis?

- OA
- Arthritis
- Cam deformity
Seronegative arthritis

- 25-year-old male
- Bilateral abnormalities
- Synovial osteophytes
- Generalised joint space narrowing
22-year-old male – one year pain duration in left hip

CAM deformity?
Arthritis / synovitis of the hips

- Younger adults – most commonly males
- Symptoms from one hip only
- Bilateral synovial osteophytes
- Most commonly normal joint spaces

Ankylosing spondylitis
Remodeling of synovial osteophytes

Male, 32 years

Female, 23 years

Male, 24 years
Synovial osteophytes – the lateral bump

Most commonly confined to the lateral head/neck junction

Normal alpha angle
Hip pain and surgery

Forgetting the sacroiliac joint
Seronegative arthritis – synovitis of the hip joint
Synovial osteophytes in younger adults

- Reactive arthritis
- Ankylosing spondylitis
- Psoriatic arthritis
- Enteropatric spondyloarthritids
- Undifferentiated spondyloarthritids

- Intraarticular haemorrhage – synovitis – contact sports

Literature – radiographic appearances: Sparse


Loder RT and Skopelja EN. The Epidemiology and Demographics of Slipped Capital Femoral Epiphysis. ISRN Orthopedics. 2011
Incidence: 0.33 – 24.55 / 100,000 children
Hip pain in younger adults

- AP radiograph of the pelvis incl. SI joints, iv. L5/S1 and hips in internal rotation
- OA is the last differential diagnosis
- First differential diagnosis with bilateral lateral head/neck osseous protusion is synovitis sequelae – seronegative arthritis
- Do not forget the SI joint
- Symptomatic CAM impingement may be secondary to remodeling of osteophytes after seronegative arthritis
- Osteophytes of hips commonly seen in contact sports intraarticular haemorrhage create synovitis and osteophytes
Minor synovial osteophytes may be indicative of arthritis!

Thank you!

Male 21 years

STIR