HIP OSTEOARTHRITIS

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MEET YOUR TA ☺

Winston-Salem, NC

Double Tarheel

My gap year in OBX

Interests: outpatient ortho and geriatrics

Fun fact: love a crossword puzzle

OUTLINE

- What is hip OA?
- What to look for in clinical exam
- Differential Diagnosis
- CPRs
- Intervention
- Outcome Measures
- Lab

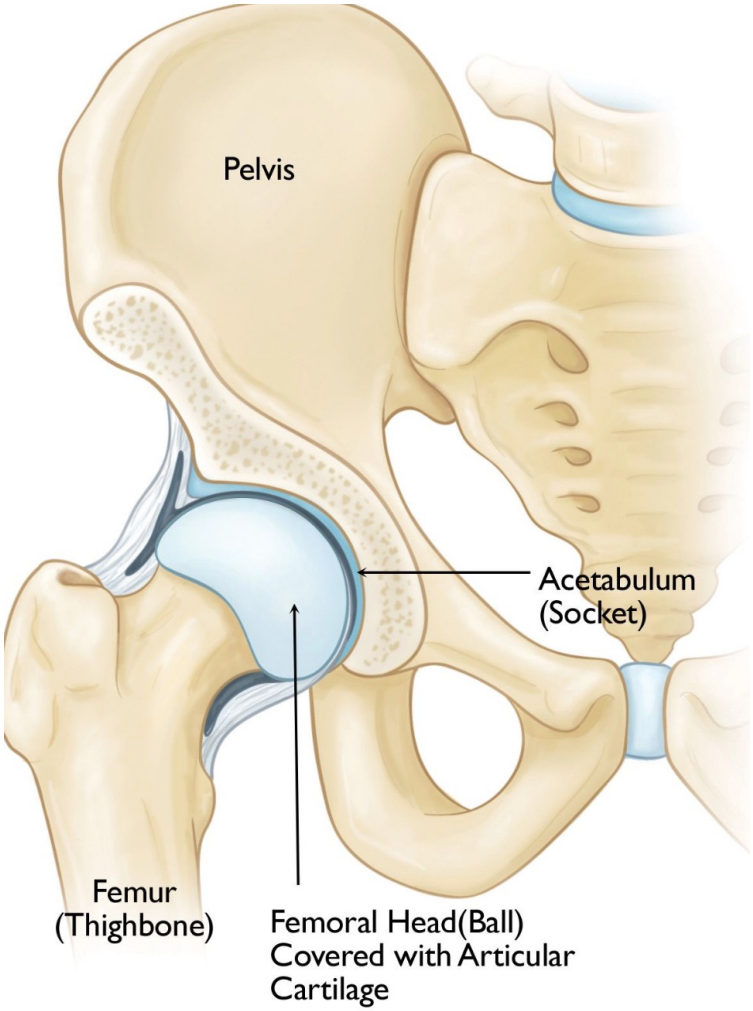
ANATOMY REVIEW[1,2,3]

Hip Joint

- Ball-and-socket

Articular Cartilage

Synovium

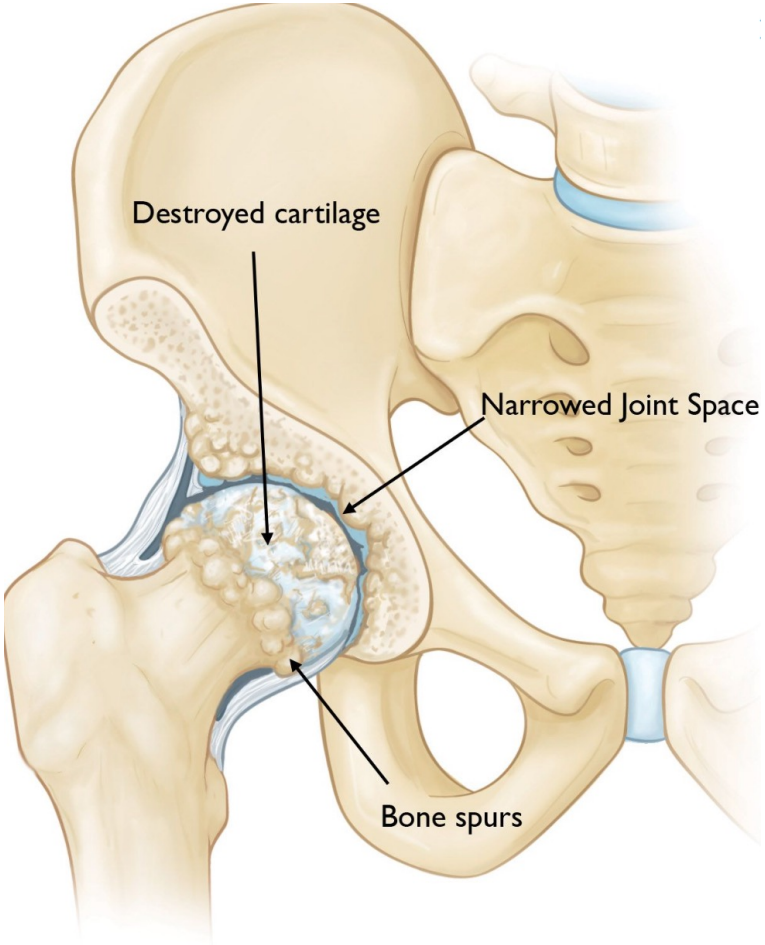


The normal anatomy of the hip.

https://orthoinfo.aaos.org/en/diseases--conditions/osteoarthritis-of-the-hip/

HIP OSTEOARTHRITIS[1,2,3]

- Degenerative
- Cartilage Damage
- Narrowed Joint Space
- Osteophytes

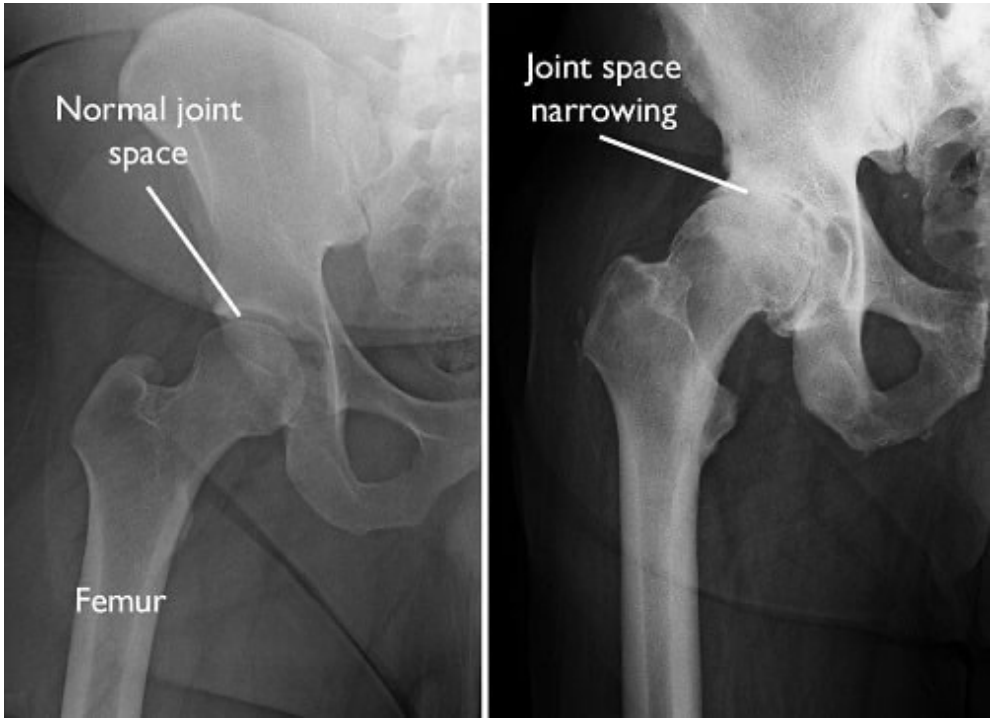


A hip damaged by osteoarthritis.

https://orthoinfo.aaos.org/en/diseases--conditions/osteoarthritis-of-the-hip/#:~:text=In%20osteoarthritis%2C%20the%20cartilage%20in,in%20bone%20rubbing%20on%20bone.

HIP OSTEOARTHRITIS[1,2,3]

- Affects 10-25% of the population > 55 years old
- Decreased QOL
- Conservative treatment is affective
  - Weight reduction
  - Exercise
  - Manual therapy
- Accurate and early diagnosis
  - X-Ray
  - Clinical Diagnosis



HIP OA-SUBJECTIVE[1,2]

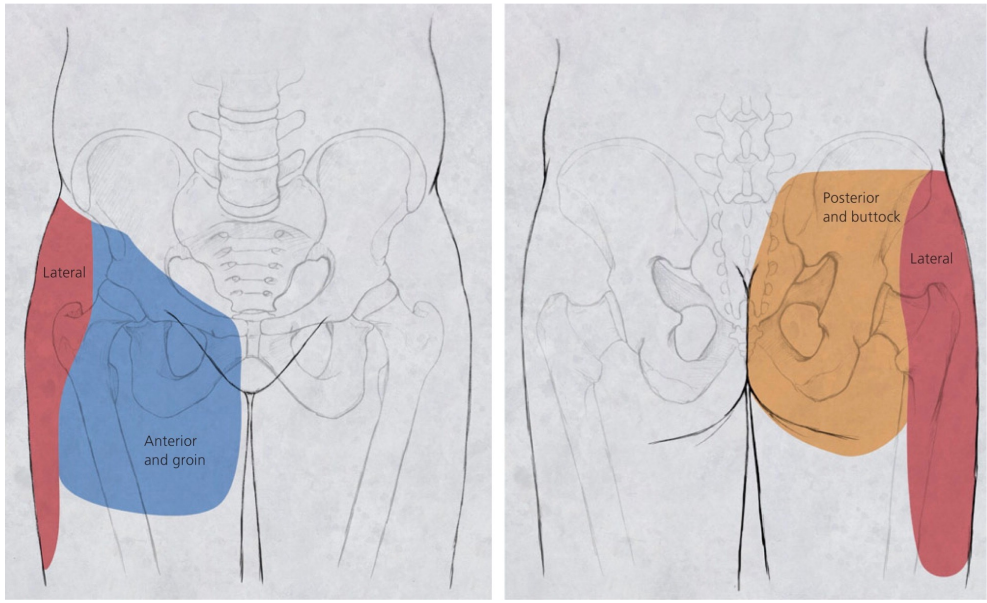
- **Patient population**:
  - > 50 y.o.
  - Congenital hip dysplasia, Legg-Calve Perthes, SCFE, LLD
- **Insidious onset of pain**[19]
- **Pain:**
  - Anterior thigh, groin, lateral hip, lower back, knee
  - Deep, ache
- **Aggs:**
  - Squatting
  - Stiffness or pain with movement after rest lasting < 30 min
  - Increased pain with disuse or vigorous use
  - Ascending stairs
  - Active hip extension

HIP OA – OBJECTIVE[1,4,5,6]

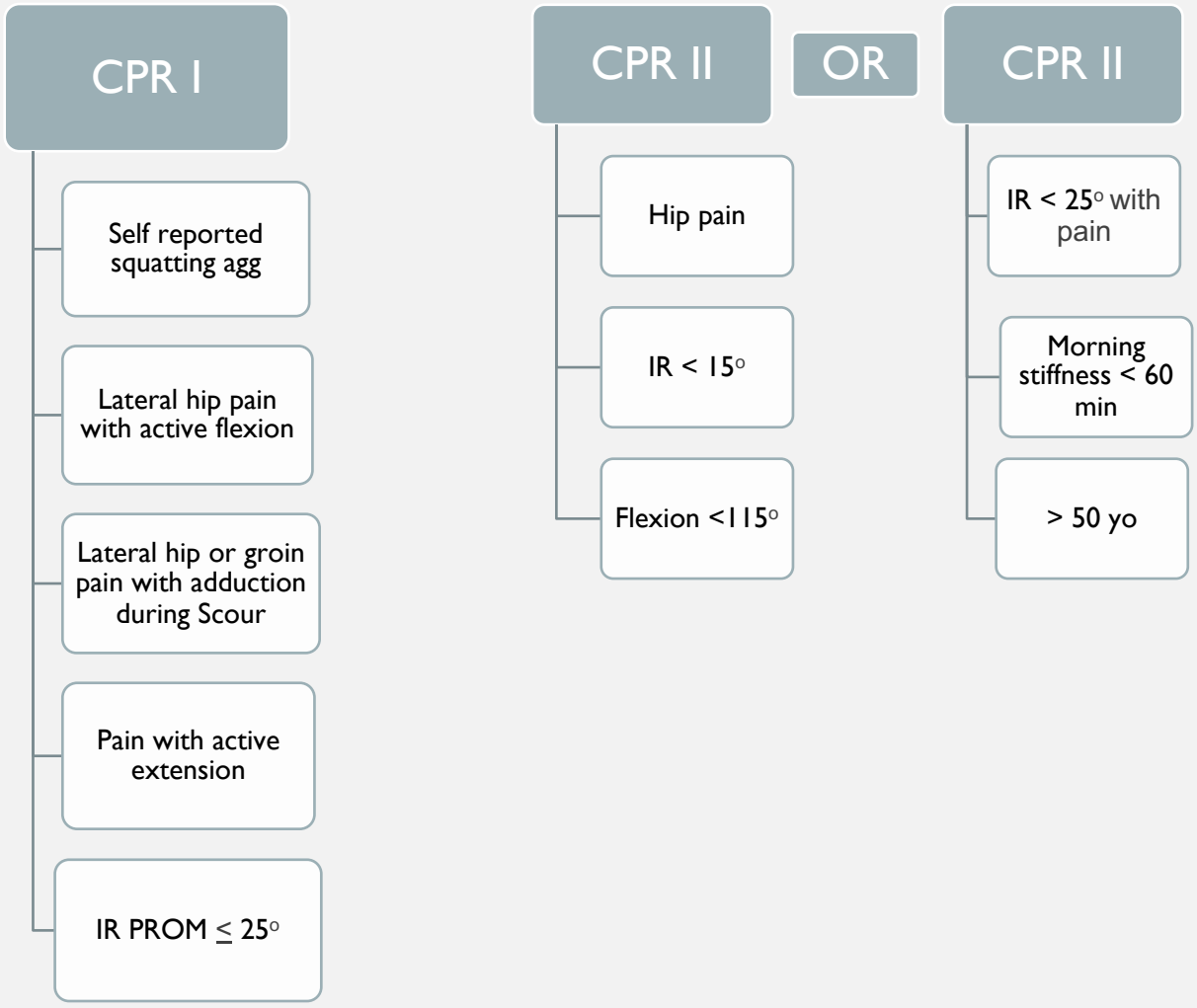
- **PROM and AROM**:
  - Decreased
  - Capsular Pattern
    - IR > Flexion > ABD
  - CPRs
- **Crepitus**
- **Special Tests**:
  - FABER
  - FADIR
  - Scour

DIFFERENTIAL DIAGNOSIS[7]

- Muscle Strain
- Athletic Pubalgia
- Bursitis
- Labral Tear
- Fracture
- Snapping Hip Syndrome
- Sciatica
- Joint Capsule Disorder
- Meralgia Paresthetica
- GTPS



CLINICAL PREDICTION RULES[1,4]



WHAT CAN WE DO? [1,7,8,9,10,11,12]

- **Patient Education**
  - "Becoming motivated and involved"
- **Strengthening**
  - Strengthen muscles around joint
- **Manual Therapy**
  - Stretching + mobilization and manipulation
  - Thrust, non-thrust or STM
  - Maintain what is gained through manual with exercise

WHAT CAN WE DO? [1,7,8,9,10,11,12]

- **Exercise**
  - Aquatic therapy
  - Function, gait, balance
  - Flexibility, endurance
- **Orthoses/Shoes**
  - Malalignment
  - Bracing is not the first line of action

- **Assistive Devices**
  - Reduce stress on joints
  - Increase daily function
- **Modalities**
  - Heat and US for pain reduction

EVIDENCE-BASED TREATMENT[13]

- Abbott et al.
- 206 adults with hip or knee OA
- **Multi-modal exercise**: aerobic, strengthening, stretching, NMSK control
- **Manual**: thrust, non-thrust, stretching, STM + ROM HEP 3x/wk
- **Combined**
- Outcomes: Manual and Exercise both provided performance benefits over usual care; no added benefit from the combination

EVIDENCE-BASED TREATMENT[9]

- Wei-Heng et al
- PT impact on incidence of THA
- 60-80 year olds who received >24 PT sessions within 1 year of OA diagnosis significantly decreased THA
  - Decrease pain, increase mobility, delay age related changes
- Intervene early!

EVIDENCE-BASED TREATMENT[15]

- Kloek et al
- Short- and long-term effectiveness of e-exercise compared to in-person PT
- 208 adults with hip/knee OA
- 3-month intervention
  - Graded activity, strength/stability, education
  - 5 online sessions; 12 in person sessions
- **E-exercise group**: increase in PA at 3 months; increase in sedentary behavior at 12 months
- **Outcomes**: decreased pain, decreased tiredness, increased QOL, increased self-efficacy
  - Hip OA outcome score, TUG, SQUASH

OUTCOME MEASURES[15,16,17,18]

- 6MWT
- 10-meter walk test
- Oxford Hip Score
- 30 sec STS
- Harris Hip Score
- Hip Disability and Osteoarthritis Outcome Score
- Lower Extremity Functional Scale

LAB

- FABER
  - OA, FAI, Labrum, GTPS
- FADIR
  - OA, FAI, Labrum
- Scour
  - OA, labrum
  - Adduction
- Mobilizations

THANK YOU!

https://create.kahoot.it/share/hip-oa-knowledge-check/5bcd00b3-2ecc-49ed-8858-47dd5f9dd2a8

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