VIRTUAL HIP EXAM

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OBJECTIVES

1. Differentiate between hip joint and non-hip pathology on history;
2. Maximize virtual/telehealth experience for the examination of the hip;
3. To understand when a physical encounter is necessary to establish diagnosis or provide ongoing care;
4. To understand indications for imaging.

EVALUATING A PATIENT WITH HIP PAIN: DIFFERENTIAL DIAGNOSIS

Hip-related

- Intra-articular
  - OA
  - FAI
  - dysplasia
  - Loose bodies
  - synovitis
- Extra-articular
  - Extra-articular impingement
  - Capsular problems
  - Pertrochanteric pain
  - Glut med/min tears

Non-hip related

- Back pain/Sacroiliac pain
- Inguinal hernia
- Sports hernia
- Gynecological/Urogenital
- Myotendinous injuries
- Pubalgia
- Nerve compression syndromes

EVALUATION OF PATIENT WITH HIP PAIN

- Patient Demographics
  - Older pt more likely to have OA
  - Females – pincer FAI or dysplasia
  - Males – CAM FAI
- Clinical history
  - Onset of pain
  - Childhood history of hip disorders
  - Family History of hip disorders

EVALUATION OF PATIENT WITH HIP PAIN

- Location of pain
  - C-sign
    - More indicative of intra-articular pathology
  - Lateral pain +/- snapping
    - Coxa saltans
    - Pertrochanteric bursitis/tendinopathy
  - Thigh/buttock/radiation below knee
    - L-spine, buttock or thigh musculature
  - Lower abdomen
  - Pubalgia

PHYSICAL EXAMINATION

- Requires internet connection
- Communicate via verbal description of the movement/test
- Supplement with demonstration or visual aids
- Observation and documentation of findings

IMAGING

- Radiographs are the most important imaging modality
- MR ARTHROGRAM helpful when radiographs are normal
  - can potentially assess labral and chondral defects
- INTERPRET POSITIVE FINDINGS CAREFULLY

BEWARE OF FALSE-POSITIVES

- Asymptomatic CAM
  - 34% athletes
  - 23% in general population
- Asymptomatic Pincer
  - 67% in average population
- MR Arthrogram
  - 68%.1 incidence of asymptomatic labral tear in general population

Frank JM. Arthroscopy 2015:31(6)1199-204

TREATMENT

- Non-operative management
  - ACTIVE Physiotherapy
    - Address extra-articular contributions to pain
    - Role of pelvic inclination and stability in FAI
      - P. Beaule COA presentation 2018
  - Image guided injections
    - Therapeutic vs Diagnostic

IMAGE-GUIDED INJECTIONS

- Pain relief supports a diagnosis of intra-articular pathology
- Local Anesthetic +/- Corticosteroid +/-Hyaluronic Acid
  - Relief at 12 months
- Negative response is associated with poor surgical outcome

Khan W. Orthop J Sports Med 2015;3(9):2325967115601030

SURGICAL MANAGEMENT OF HIP DISORDERS: HIP ARTHROSCOPY

- Patient selection
  - 14% of people with groin pain have FAI
- Prognostic factors
  - Higher rate of failure
    - >40-60 yrs of age
    - Osteoarthritis
    - Dysplasia
    - Obesity
- Goals and outcomes following surgery
  - Improve QOL
  - Role in prevention of OA is yet undetermined

Malviya, M. Journal of Hip Preservation Surgery, Volume 3, Issue 1, 1 April 2016, Pages 79–81, https://doi.org/10.1093/jhps/hnw010

SURGICAL MANAGEMENT OF HIP DISORDERS

- Open surgical options
  - Pelvic osteotomy
    - Dysplasia
  - Hip arthroplasty
    - Osteoarthritis

INDICATIONS FOR IN-OFFICE ASSESSMENT

- Inability to obtain clear history
  - Location of pain
- Inability to obtain clear physical exam
  - Execution of physical exam maneuvers
  - Neurologic and manual muscle testing (Gr. 3-5)
  - Ligamentous exam
- Failure of non-operative management

CONCLUSIONS

1. Virtual assessment is a valuable tool for evaluation of the hip;
2. Requires adequate communication and coordination;
3. Many cases of hip pain can be managed virtually,
4. Radiographs are imaging of choice, MRI if radiographs are normal but EXPECT POSITIVE FINDINGS AND INTERPRET CAREFULLY.