Indications for Hip Arthroscopy

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Ortho Team Course

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Introduction

• Surgical treatment of symptomatic hip disease has changed over the last decade
  – Arthroscopy
  – Osteotomy (PAO)
  – Surgical hip dislocation
Goals

• Review Established Indications for hip arthroscopy

• Discuss evolving indications for hip arthroscopy

• Review contra-indications for hip arthroscopy
Development of Arthroscopic Techniques

- Improved instrumentation
- Co-adaptation of shoulder techniques
- Clear evolution of hip specific techniques
  - T capsulotomy
  - Labral fixation
  - Flexible/angled instrumentation
Explosive Growth of Hip Arthroscopy

- 3.6 → 16.7 per 100,000
- 460% increase in utilization
- Expanding Recognition of pathology
- Mainstream education of residents
- Fellowship programs dedicated


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Hip Arthroscopy

• Setup
  – Supine or Lateral decubitus position
  – Requires Traction
    • 50lbs, 10mm
    • Goal <90min
  – C-Arm
Hip Arthroscopy

- Approach/Technique
  - 2 or 3 portals
    - 3rd- Distal anterior lateral (DALa) - improved placement of anchors
    - Do not go past midline to avoid injury to LFCN
Established Indications

- FAI
- Labral tears
- Loose bodies
- PVNS, synovial based pathologies
- Ligamentum tears
Labral Repair
Femoroacetabular Impingement

- Process by which a misshapen hip joint secondarily leads to breakdown of the intra-articular structures causing pain and dysfunction
FAI – Structural Impingement

- Acetabular rim impingement
- Associated labral lesions
- Femoral impingement
28 yo CAM/FAI
Isolated Intra-articular Abnormalities

- Labral tears - traumatic
- Ligamentum tear
- Loose bodies
  - Synovial osteochondromatosis
  - trauma
- Synovitis
Isolated Peri-articular Abnormalities

• Excision of Os Acetabuli
  – Associated labral tear/repair
Extra-articular Femoro-Pelvic Impingement
Evolving Indications

- Psoas impingement
- Peri-articular soft tissue procedures
  - IT band release
  - Abductor repair
- Ischiofemoral impingement
Evolving Indications

- Psoas impingement
- Peri-articular soft tissue procedures
  - IT band release
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- Ischiofemoral impingement
37 yo with painful grinding sensation/sound with walking

Ischiofemoral impingement

Quadratus femorus
Contra-Indications for Hip Arthroscopy

• **Advanced intra-articular disease**
  - Acetabular cyst formation
  - Vacuum sign
  - Posterior/inferior osteophyte formation
Contra-Indications for Hip Arthroscopy

- FAI with Tonnis 2 or higher
  - Severity of lesions dependent on
    - Degree of structural conflict
    - Duration symptoms
Contra-Indications for Hip Arthroscopy

- Complex/extensive pathomorphology
  - Posteriolateral extension of CAM
  - Global rim trim
  - Pediatric disease sequelae
    - SCFE
    - Perthes
Contra-Indications for Hip Arthroscopy

• Severe Acetabular retroversion
  – Antero-superior over coverage
  – Posterior wall sign
  – Ischial spine sign
Contra-Indications for Hip Arthroscopy

• Posterior femoral neck pathology
• CAM lesion that extends posterior to retinacular vessels

Osteochondroma on femoral neck
Contra-Indications for Hip Arthroscopy

- Inaccessible hip
  - Obesity
  - Heterotopic ossification
  - Severe scaring
Contra-Indications for Hip Arthroscopy

- Dysplasia
Conclusions

• Excellent clinical outcomes can be expected with established indications
  – FAI
  – Isolated intra-articular hip abnormalities

• Can be effective adjunct to open procedures

• Major contra-indications are established OA and major structural deformities

• Future study is needed to delineate evolving indications
Thank You