Hip Arthroscopy

Principles, Indications and Limitations

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Hip Pain

- Congenital
- Trauma
- Sepsis
- Overuse
- Degeneration
- Arthritis
- Instability
- AVN
60% of intraarticular hip injuries are mis- or non-diagnosed and treated as strains
Hip Arthroscopy

✓ Alternative to arthrotomy for traditionally recognized hip pathologies
  
  Loose bodies, sepsis, arthritis

✓ Management of previously unrecognized & untreated diseases
  
  Labral tears, articular injuries, ruptured ligamentum teres, FAI
We can treat only what we can see
Hip Arthroscopy Indications

- Sepsis
- Loose or foreign body removal
- Synovial Biopsy
- Arthritis/Synovitis/Chondromatosis/Crystalline Arthropathies
- Labral tears
- Ruptured or impinging ligamentum teres
- Cartilage damage
- Dysplasia
- Femoroacetabular impingement
- Capsular shrinkage (Ehlers-Danlos syndrome)
- After total hip arthroplasty
- Osteonecrosis (early stages prior to collapse)
- Extra-articular conditions / Iliopsoas bursoscopy
Contraindications

- technical insufficiency
- no distractability / ankylosis / HTO
- skin infection
- incorrect diagnosis / periarticular conditions
The Ideal Candidate

- memorable traumatic event
- reproducible mechanical symptoms (intermittent pain or catching, locking)
- failed an adequate trial of conservative treatment
- reasonable expectations
Surgical Technique
Positioning

Supine vs Lateral
Instruments, pump, cautery, cannulas, C-arm
Portals

- Anterior Portal
- Anterolateral Portal
- Posterolateral Portal
vacuum effect

anterolateral portal

disruption of the vacuum
Arthroscopic Anatomy
Central and Peripheral Compartment
Hip Arthroscopic Anatomy

Central

Peripheral
Normal Labrum
Complete view of the posterior labrum from the anterior portal
Central and Peripheral Compartment

(Extraarticular, Intracapsular)

- zona orbicularis
- medial synovial fold
- femoral neck
The posterior recess is a common location for loose bodies and intra-articular debris to hide.
Normal articular cartilage of femoral head

Fibrillation
Labral fraying
Labral Tear
Arthroscopic view of a torn ligamentum teres
Chondral Injury
Microfractures
Femoroacetabular Impingement Forms

- Normal
- CAM
- Pincer
- Mixed
36-year-old male

cam-type FAI

- pistol grip deformity of the lateral femoral head–neck junction
- calcification of the labrum
obvious bump on the anterior surface of the femoral head–neck junction
FAI: bump removal
Acetabular Retroversion: Rim Trimming
Hip Arthroscopy and Osteoarthritis

OA with associated lesions

OA alone
Complications

- overall complication rate 1.6%
- none is major or long-term
- traction <2 h

- Pudendal nerve neurapraxia
- Lateral femoral cutaneous neurapraxia
- Chondral scuffs from inadequate distraction
- Sciatic and femoral neurapraxia
- Portal bleeding
- Trochanteric bursitis
- Intra-articular instrument breakage
- Keloid scar formation - Perineal splitting - Pressure sores
Hip Arthroscopy

- Hip arthroscopy cannot treat all hip disorders
- It is effective in the treatment of intraarticular hip problems
- Early diagnosis and prompt treatment are essential
Hip Arthroscopy

- Expanding therapeutic possibilities
- Correct diagnosis essential for success
- Not always easy access