

Limits of Hip Arthroscopy - Arthroscopic vs. Open

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Problems/Anatomy

- Constrained Ball-Socket-Joint
- Limited distraction
- Strong capsule
- Thick soft tissue mantle

☺ female, lax

☹ male, stiff, profunda



Contraindications/Limits

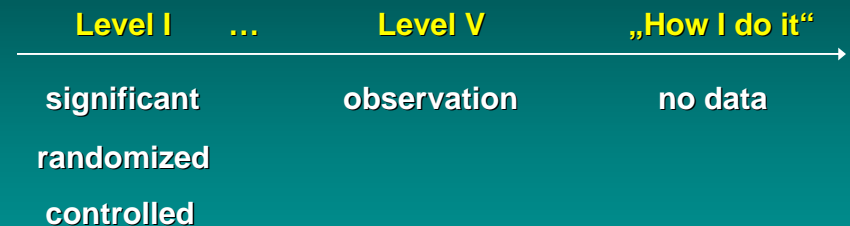
- Fresh acetabular Fx
- Advanced Osteoarthritis
- Tumours/synovial Disease
- Malalignment/Deformity
- FAI

Barett/Goldberg JBJS-A 1989
Byrd Operative Hip Arthroscopy 1998



“How I do it”

... the worst level of evidence



... the following recommendations are mostly not based on data

Acetabular Fracture

- Fluid extravasation: ⇒ ruptured capsule: groin/thigh
⇒ fracture: retroperitoneum

⇒ Scope later than ca. 4 weeks post trauma

*Barett/Goldberg JBJS-A 1989
Byrd Operative Hip Arthroscopy 1998*

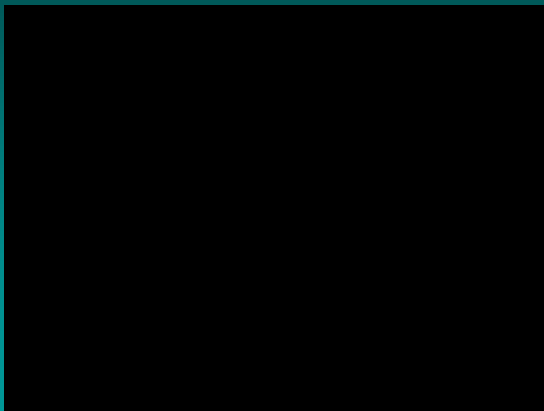
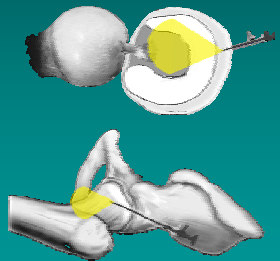
Acetabular Fracture

Osteochondral Fragments – Fossa + Periphery sp Post Wall Fx



Acetabular Fracture

Osteochondral Fragment Removal 6 weeks post-Fx



Osteoarthritis

- Osteophytes: ⇒ hinder portal placement
- Capsular fibrosis: ⇒ insufficient distraction
⇒ hinder capsular distension
- ROM ↓: ⇒ indicator for longer history
⇒ fibrotic capsule, CM ↑
- Results: ⇒ limited/temporary

⇒ consider THA

Osteoarthritis

Conservative vs. Replacement Surgery

Joint Preserving

> 2 mm
rim
initial osteophytes
rim

short
sharp, catching, motion

joint space
narrowing
double floor
cysts
rotation center
history
pain

Joint Replacement

< 2 mm
central
advanced
head, central WB
lateralized
long
dull, burning, ↑activity

... sometimes a difficult decision

Osteoarthritis

THA: Double Floor



Almost complete double floor indicator for advanced OA

Osteoarthritis

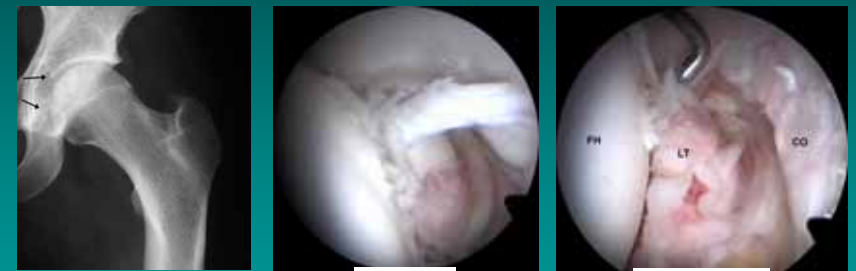
Conservative vs. Replacement Surgery

„... if you are not sure if debridement is beneficial,
do it arthroscopically !“

- less invasive
- smaller complication rate
- faster rehab
- less risk of making it worse
- does not alter anatomy (THA)

Osteoarthritis

Central Osteophytes may predispose to LT rupture



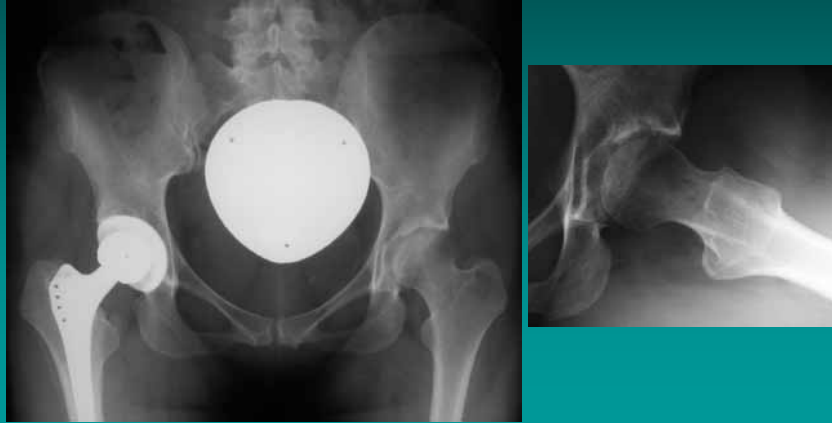
via anterior

via anterolateral

Initial double floor may profit signific. from arthroscopy

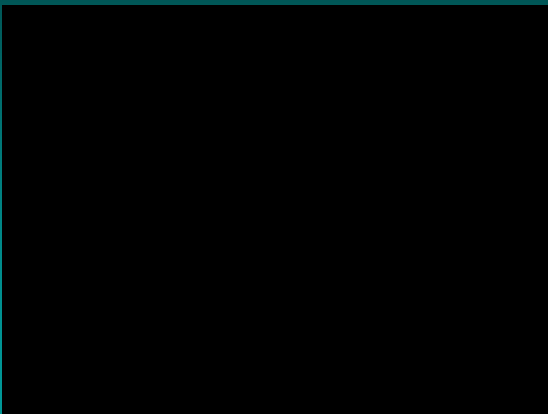
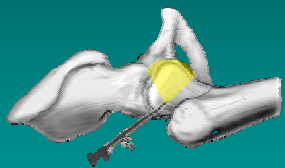
Osteoarthritis

Central joint narrowing shows less benefit from ASC



Advanced Osteoarthritis

ASC Debridement



Osteoarthritis

OA secondary to Cam FAI may benefit from debridement



Tumors / Synovial Diseases

- | | |
|---|--|
| <ul style="list-style-type: none"> ● Arthroscopy <p> biopsy of intraarticular tumors
 treatment for localized tumors
 removal of local PVNS
 removal of osteo-/chondromas </p> | <ul style="list-style-type: none"> ● Open Surgery <p> diffuse PVNS
 malignant tumors
 „packed“ osteochondromas
 ↓↓ ROM </p> |
|---|--|

Tumors / Synovial Diseases

Ganglion/Cyst

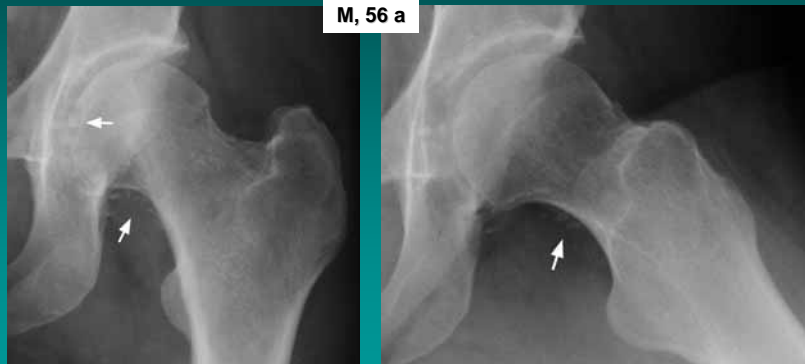


Open Surgery !

Tumors / Synovial Diseases

“Early – moderate” Osteochondromatosis: Arthroscopy

M, 56 a

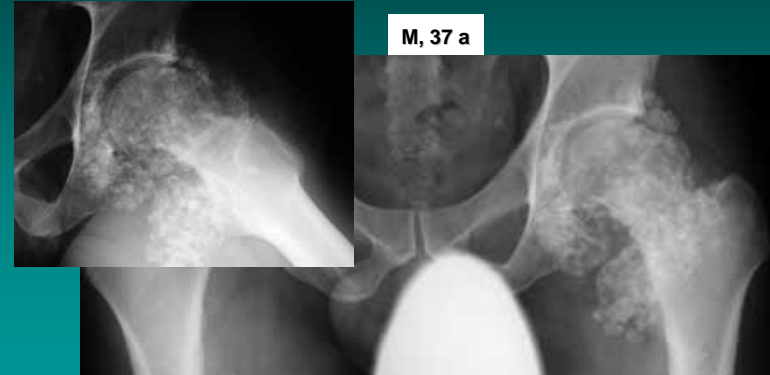


Arthroscopic Surgery !

Tumors / Synovial Diseases

“Early – moderate” Osteochondromatosis: Arthroscopy

M, 37 a



Open Surgery !

Tumors / Synovial Diseases

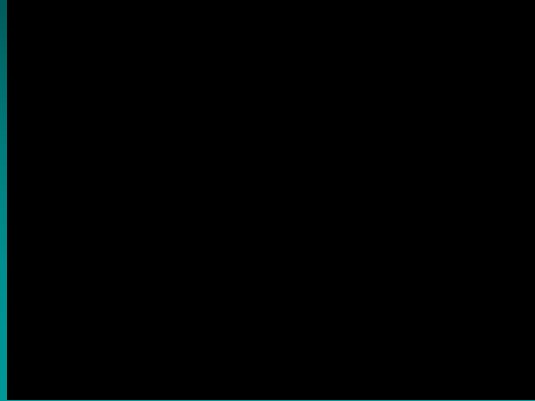
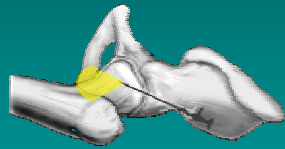
“Early – moderate” Osteochondromatosis: Arthroscopy





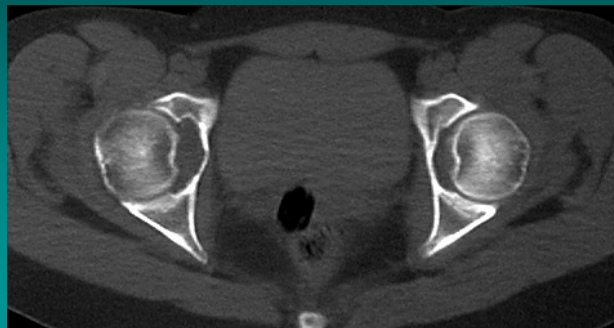
Tumors / Synovial Diseases

“Early – moderate” Osteochondromatosis: Arthroscopy



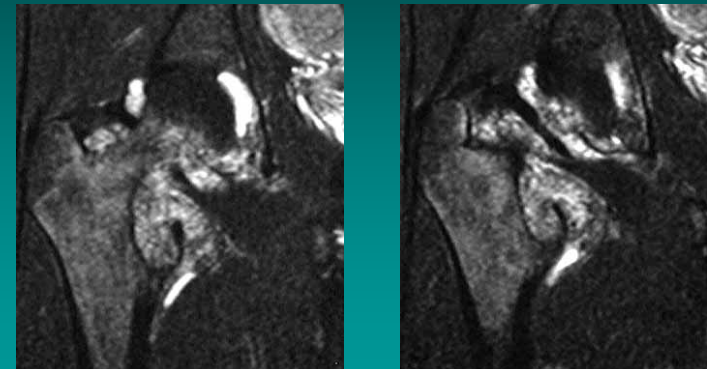
Tumors / Synovial Diseases

Atypical Chondromatosis with depression of neck/fossa



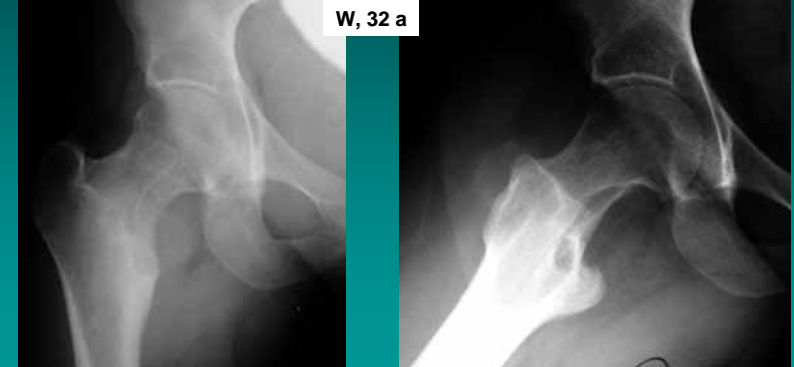
Tumors / Synovial Diseases

Atypical Chondromatosis with depression of neck/fossa



Tumors / Synovial Diseases

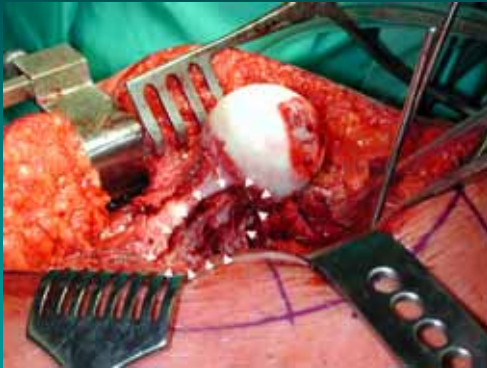
Atypical Chondromatosis with depression of neck/fossa





Tumors / Synovial Diseases

Atypical Chondromatosis with depression of neck/fossa



Open Surgery !



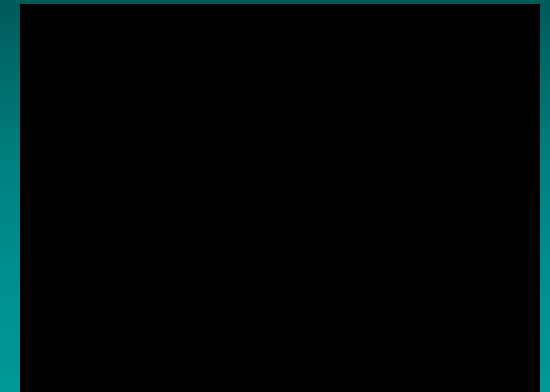
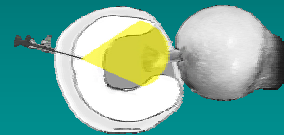
Acetabular / Femoral Deformity

Dysplasia



Acetabular / Femoral Deformity

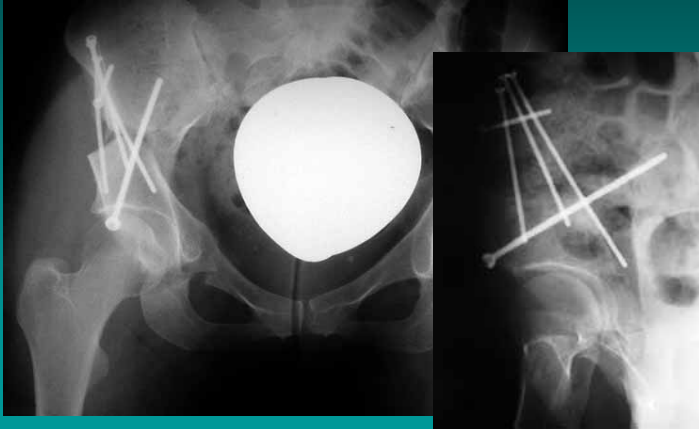
Dysplasia: Arthroscopy for Rupture of Lig. teres





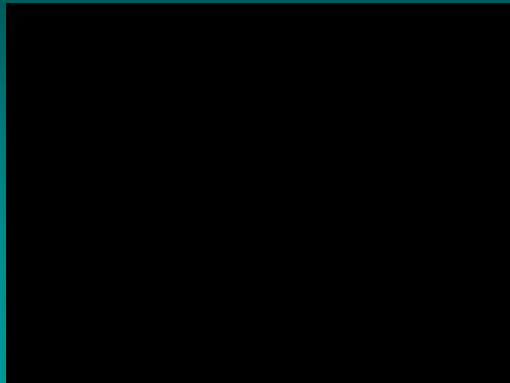
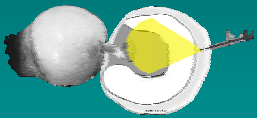
Acetabular / Femoral Deformity

Dysplasia: Definitive Treatment: open (PAO)



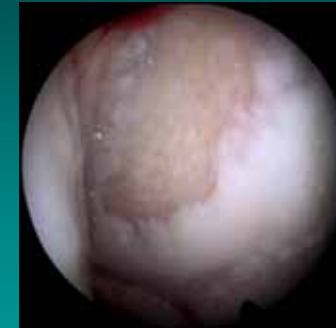
Acetabular / Femoral Deformity

Dysplasia: Cartilage good enough



Acetabular / Femoral Deformity

Dysplasia: Cartilage bad



typical CM of anterosup. lunare cartilage

Do not consider osteotomies !



FAI

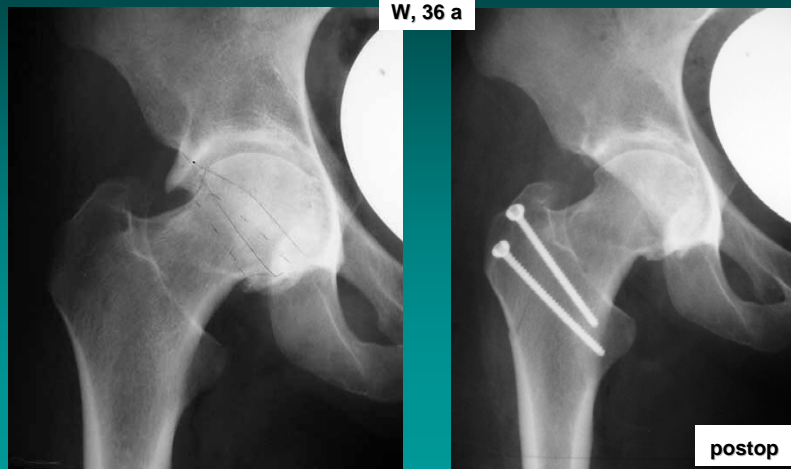
FAI – when open / arthroscopic ?



- ↑ Deformity, Malorientation
- advanced Pincer
- CAM
- initial Pincer (keep rim)



FAI Pincer/Profunda with $\downarrow\downarrow$ ROM



FAI – Pincer with degenerative/ossified labrum

Arthroscopic Rim Resection



FAI – Pincer with degenerative/ossified labrum

Arthroscopic Rim Resection

Pincer + ossified labrum



- Resection: labrum + rim



FAI – Pincer with intact labrum

Temporary Detachment of Labrum

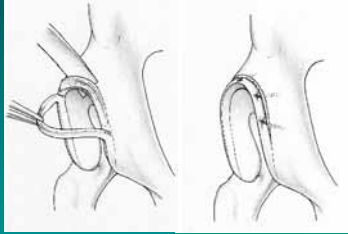
Pincer with intact labrum



- Preserving labrum:
 - temporary detachment
 - rim resection
 - refixation of labrum

FAI – Pincer with intact labrum

Temporary Detachment of Labrum



- surgical dislocation: established, precise, 2h

FAI

FAI – when open / arthroscopic ?



At the moment, I still prefer a surgical dislocation for temporary detachment of the labrum, however, arthroscopic techniques are coming...

FAI – Pincer with intact labrum

Temporary Detachment of Labrum

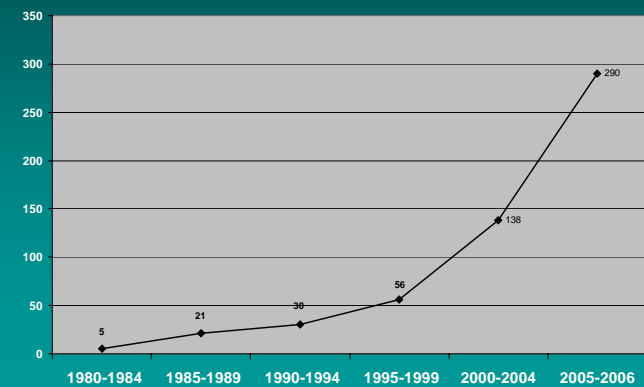
Arthroscopy beneficial?

- Techniques under development (Philippon, Sadri)
- Arthroscopy takes 3 – 4+ h
- higher risk (traction + scope injury)
- ? Advantages by Ex Fix (Sadri)

Hip Arthroscopy

Perspectives

Publications on Hip Arthroscopy



Hip Arthroscopy

Perspectives

**“We are still
many years behind the knee and
a few years behind the shoulder, but
wait another 5 years ...”**

Thank You

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