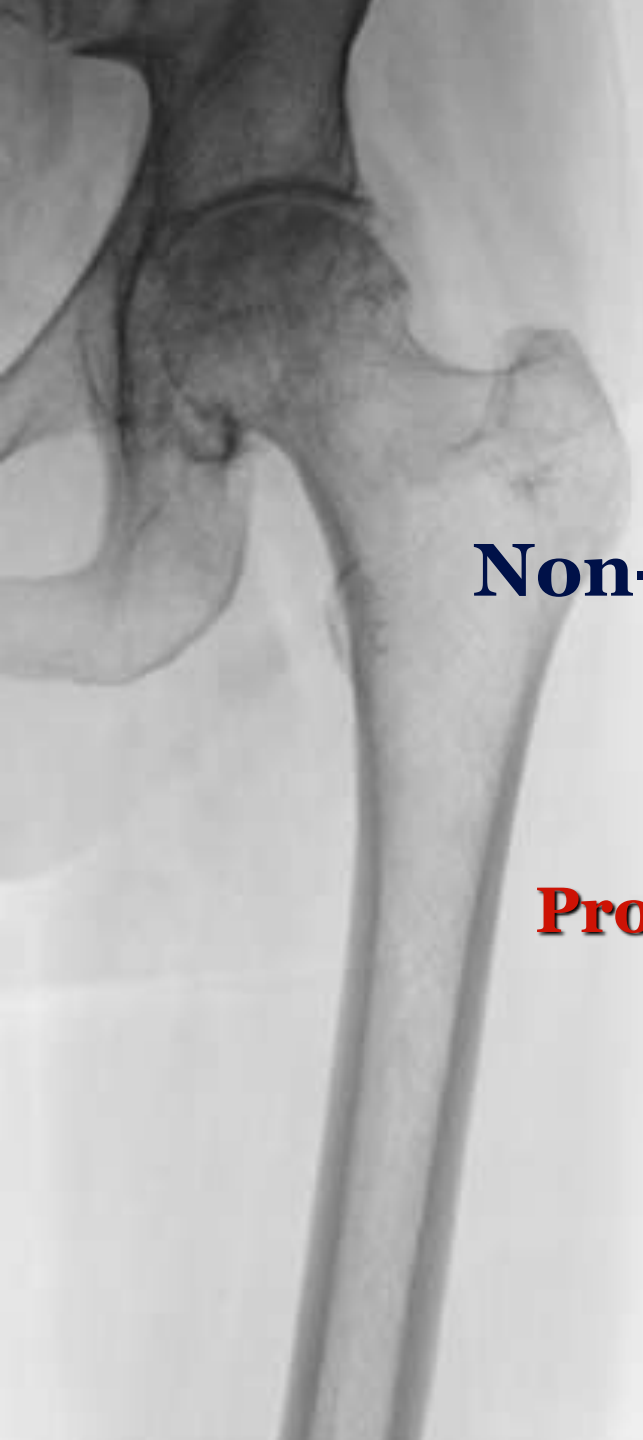


ROTHMAN INSTITUTE

Thomas Jefferson University

Non-Arthroplasty Hip Surgery

Javad Parvizi MD FRCS
Professor of Orthopaedic Surgery

Joint Preservation

- Subcapital reduction osteotomy
- Relative lengthening of femoral neck (Perthes)
- AVN surgery
  - Femoral osteotomy
  - Trap door technique
- FAI surgery
  - Hip Arthroscopy
  - Mini-open technique
  - Surgical dislocation
- Periacetabular osteotomy

Osteoarthrits: FAI

Femoro-Acetabular Impingement (FAI)

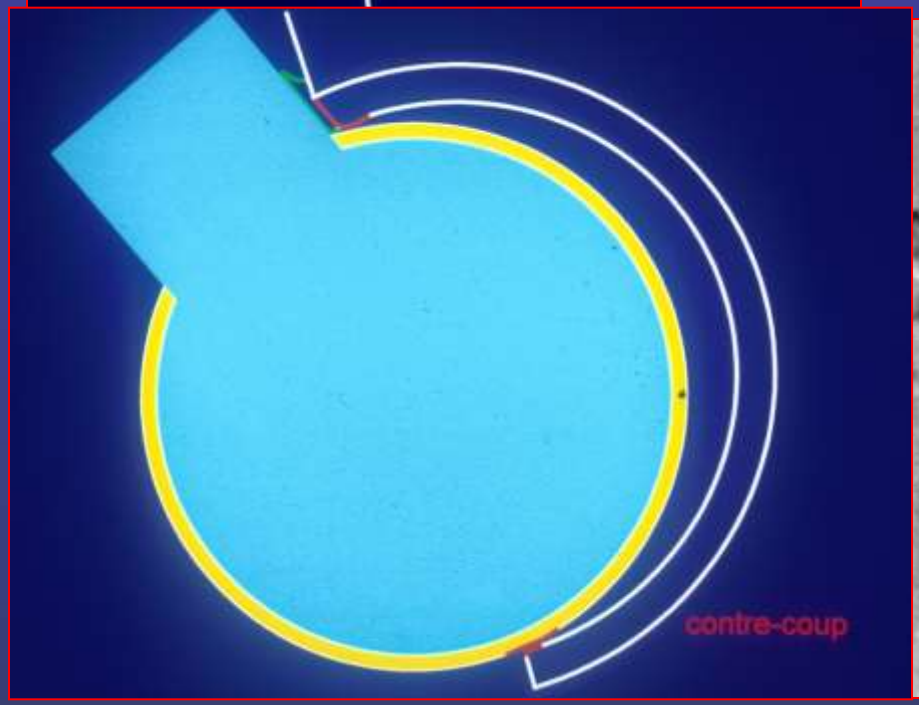
R. Ganz, Parvizi J, Leunig M. Clin Orthop 2003

Chronic anterior impingement causes damage to the acetabular rim and the adjacent acetabular cartilage

FAI: Types

Cam (Ito K. J Bone Joint Surg 2001)

Pincer



FAI: Treatment Options

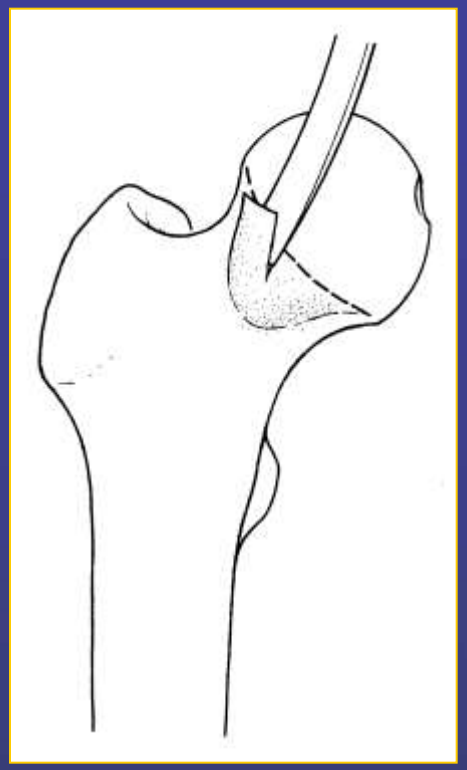
- Non-operative
  - NSAIDS
  - Activity modification

→ Unsuccessful

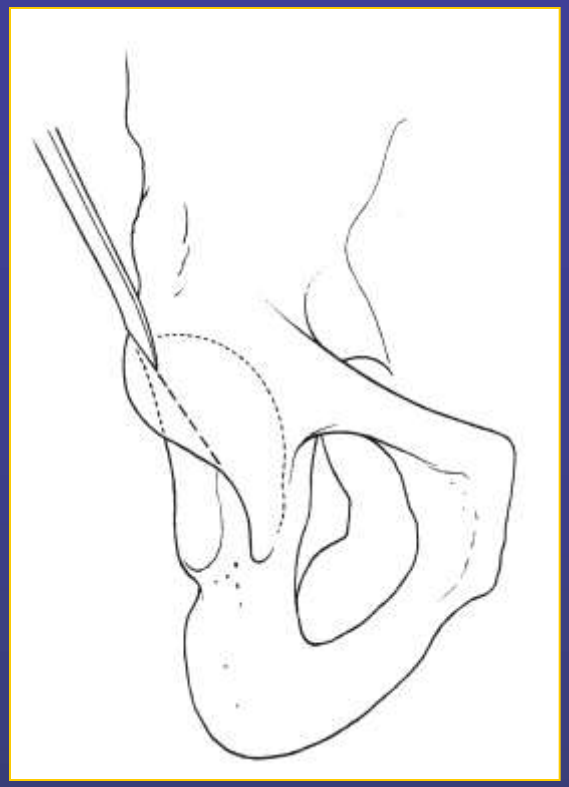
- Surgery
  - Surgical dislocation
  - Arthroscopy
  - Mini-open (direct anterior)
  - Redirectional osteotomy

FAI: Treatment Goal

Femoral neck osteoplasty



Acetabular osteoplasty

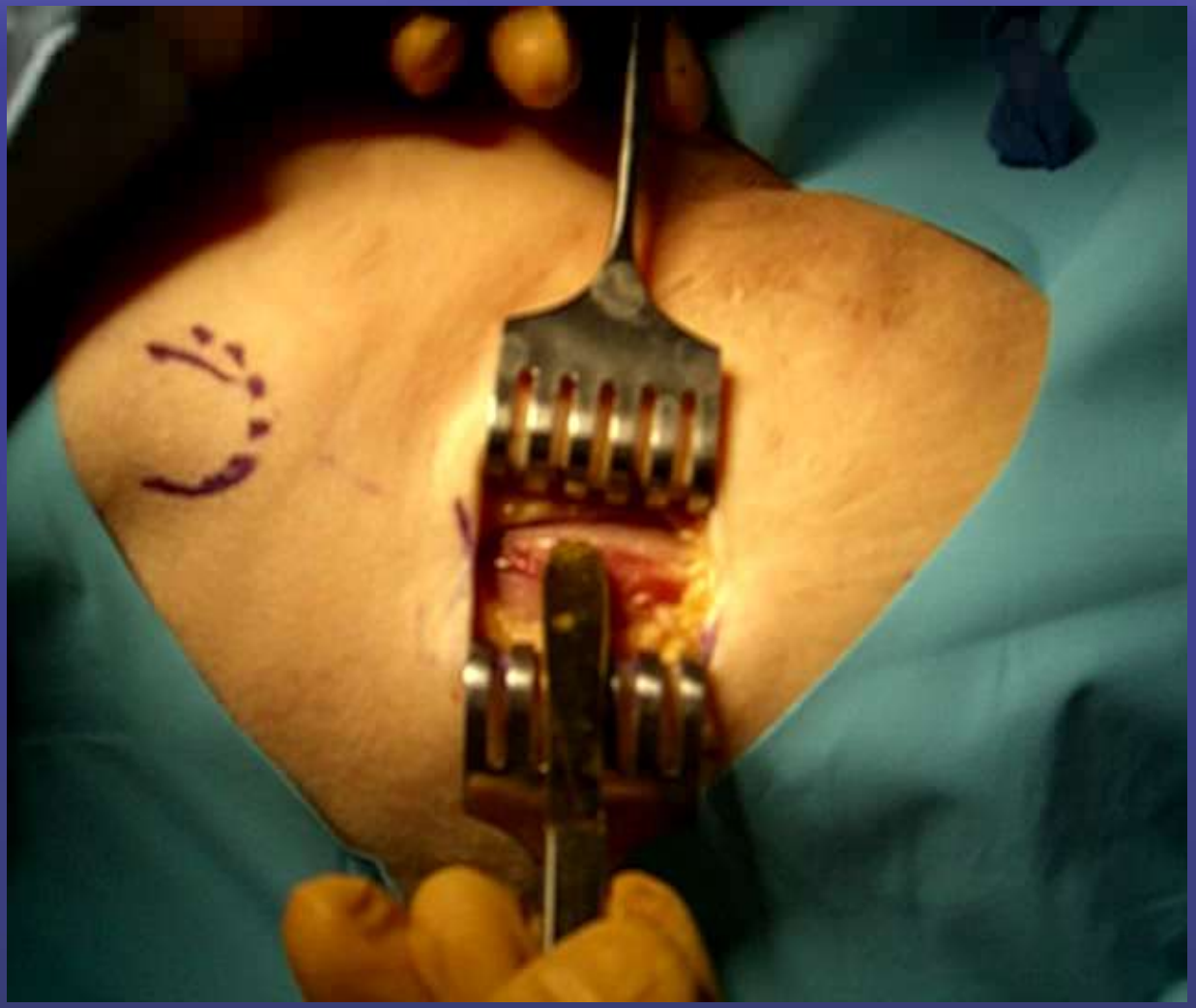


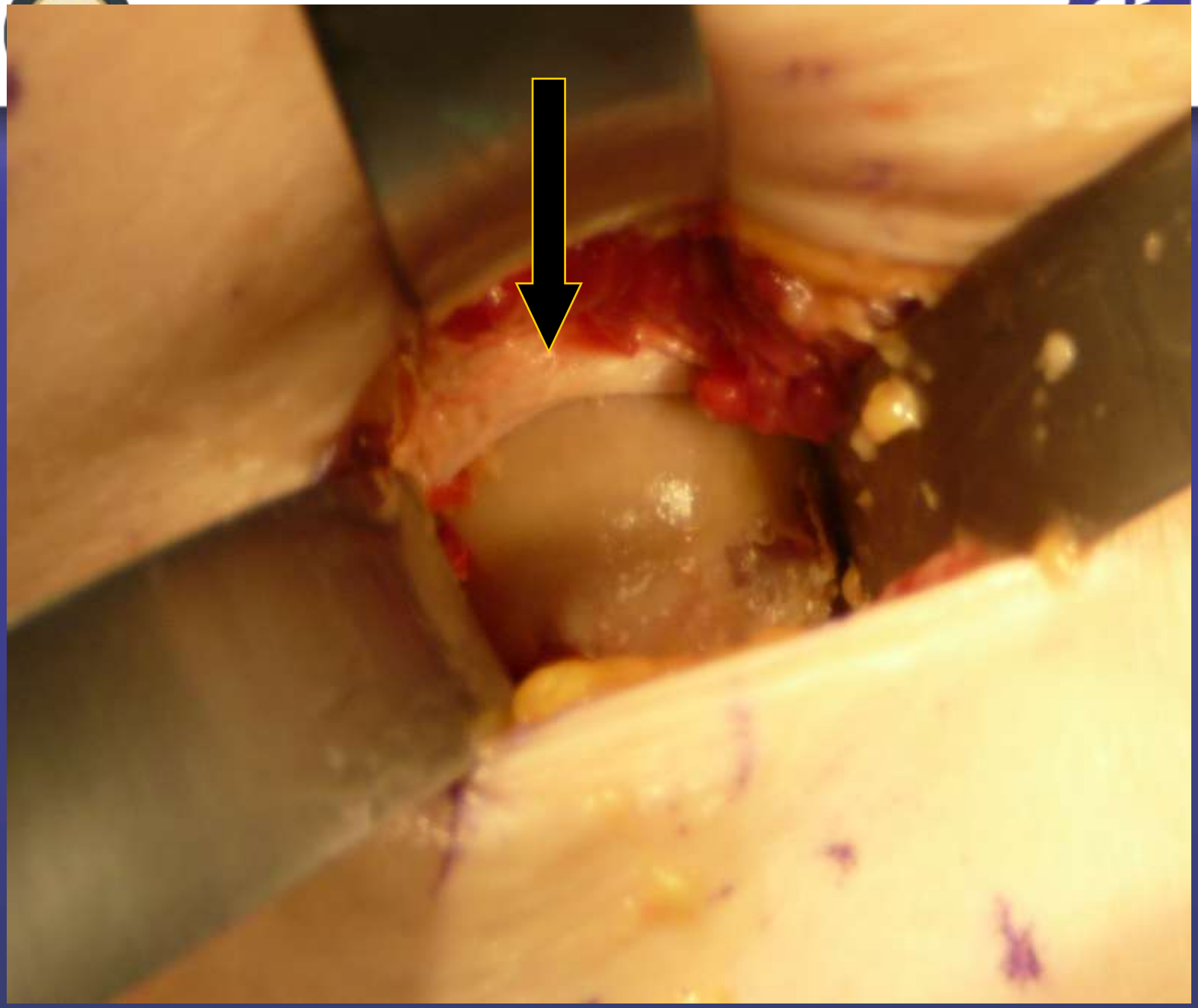
Hip Arthroscopy

- Numerous Limitations (currently)
- Confined space (Hip is not the knee or shoulder

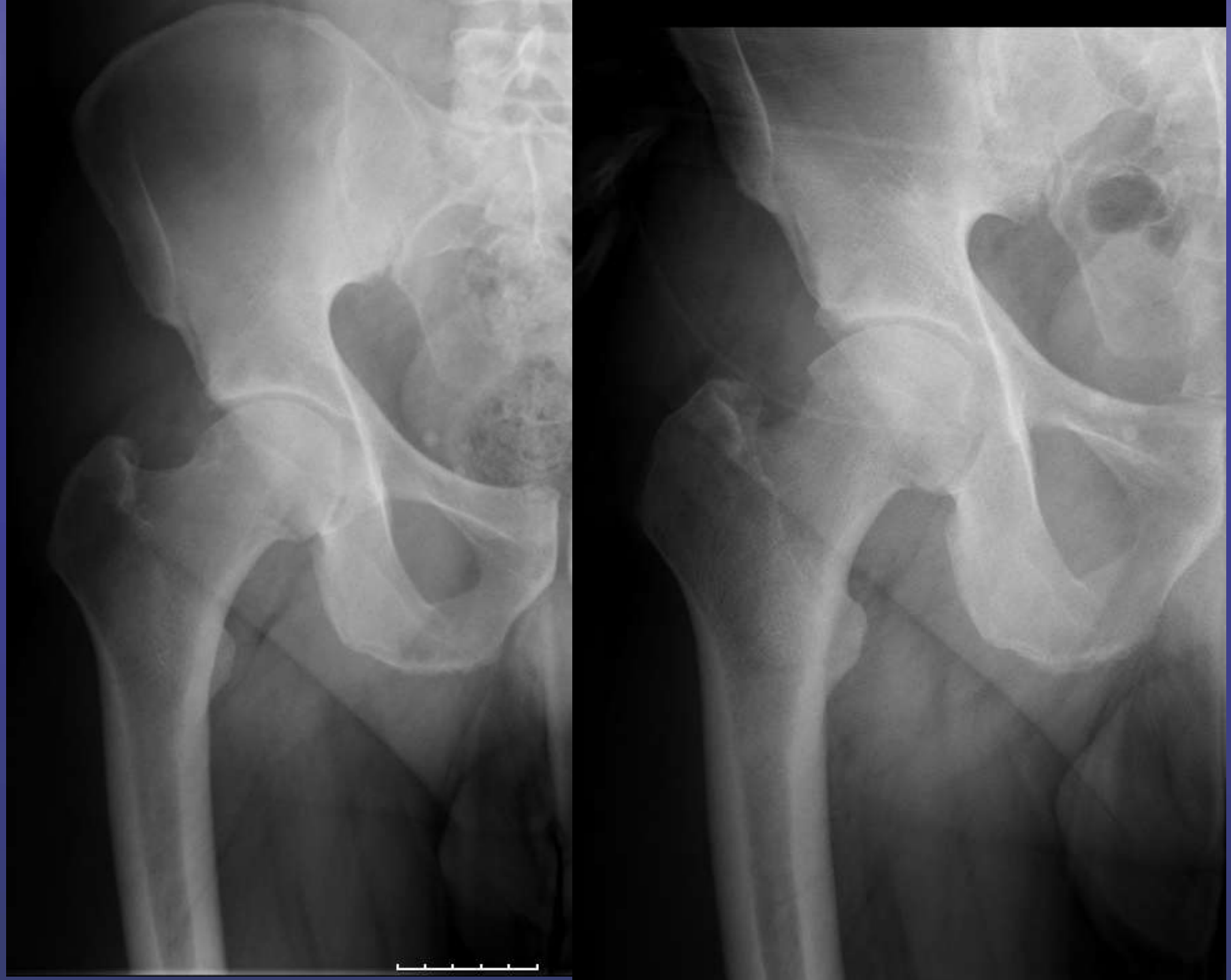
Labral repair →

Surgical Treatment of FAI
Mini-open Anterior Approach





FAI: Mini-Open




Mini-open: Protocol

- Day surgery or overnight stay
- Oral analgesia
- 2 weeks of Crutches
- 6 weeks of “hip precautions”
- PT- ROM /strengthening starting at 4 weeks

Mini-open Osteoplasty

- Started 2005
- >500
- Average operative time = 51 minutes (32-90 minutes)
- Labral repair =398 cases
- Patient satisfaction
  - Return to sports
  - Pain relief
  - Work
  - No analgesia
  - Modified Harris Hip Score/Sushi

82% Excellent to Very Good outcome
4 conversions to THA

Mini-open Osteoplasty
Predictors of Failure

- Pre-existent arthritis
  - <3 mm of joint space (p<0.0001)
  - Posteroinferios osteophyte (p<0.001)
- Labral debridement vs repair (p<0.003)
- Workman's comp (p<0.001)
- Previous surgery (arthroscopy)(p<0.05)

Hip Pain In Young Adult

- 15 year girl
- LaCrosse player
- Constant groin Pain

DDH
Presentation

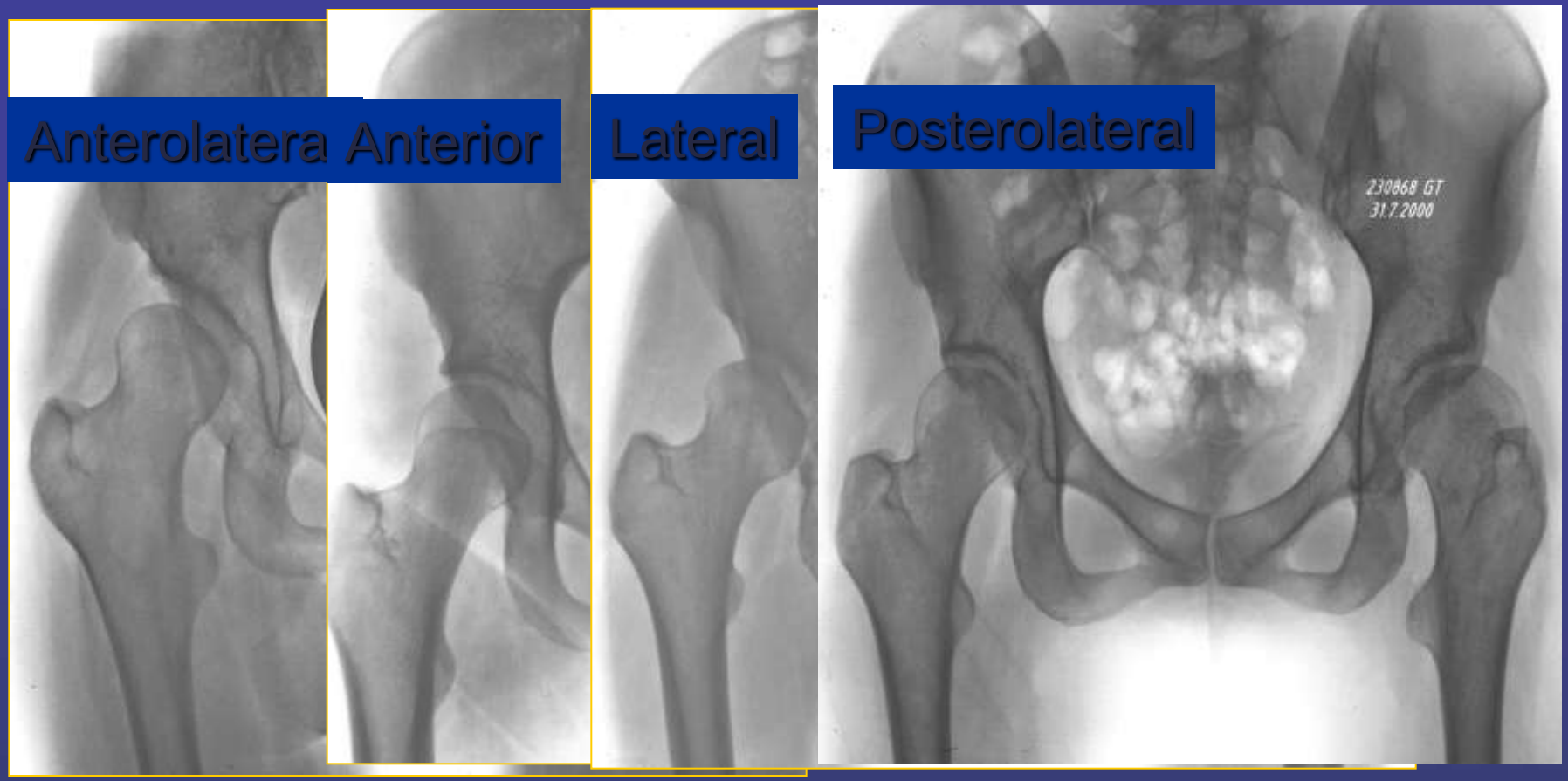
- Groin Pain
- Subluxation of femoral head
- Reproduced with hyperextension/ER
- Labral pathology = catching, locking, giving way

DDH
Preoperative Evaluation

- Plain radiographs
  - AP Pelvis
  - Lateral Hip
  - Abduction view (30/neutral)
  - False profile

DDH

Types


Anterolatera
Anterior
Lateral
Posterolateral
230868 GT
31.7.2000

DDH

Preoperative studies

- CT arthrogram/3D
- MR-arthrogram
- GMERIC

Kim JBJS 2006

Dysplasia

Treatment Options

- Acetabular Osteotomy
- Femoral Osteotomy
- Combined Osteotomy

Osteotomy
Rationale

- Reorient the articulating surfaces
  - Increased joint congruity
  - Decrease load
  - Medialize hip center (lower JRF)

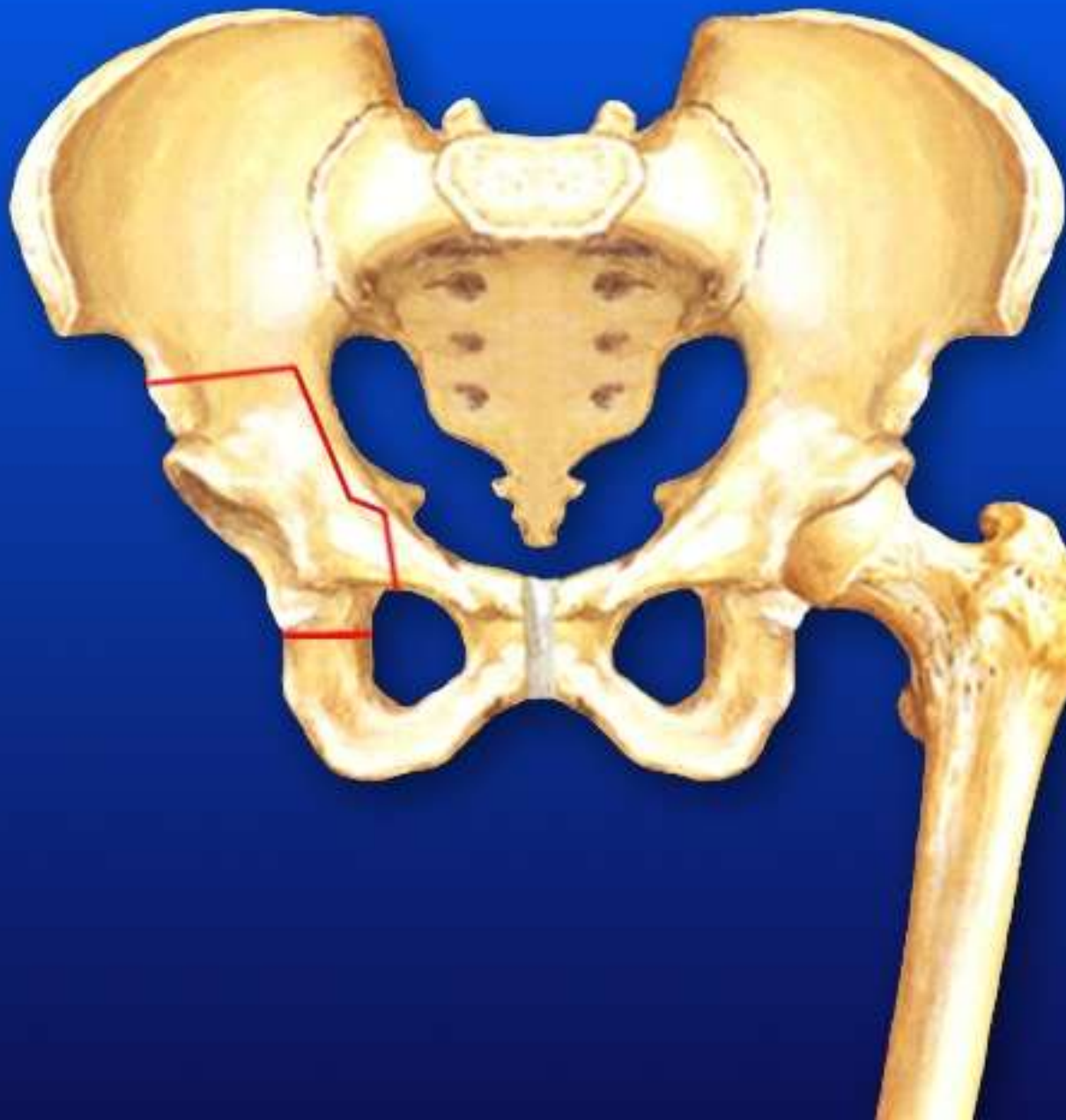
= reduced pain, possibly protect articular cartilage

Osteotomy

Indications

- Young patients with symptomatic hip dysplasia
  - Without excessive proximal migration of hip center of rotation
  - preserved ROM
  - Mild degenerative changes at most

BERNESE
OSTEOTOMY



The Surgical Management of
HIP DYSPLASIA
After Walking Age

BERNESE
OSTEOTOMY

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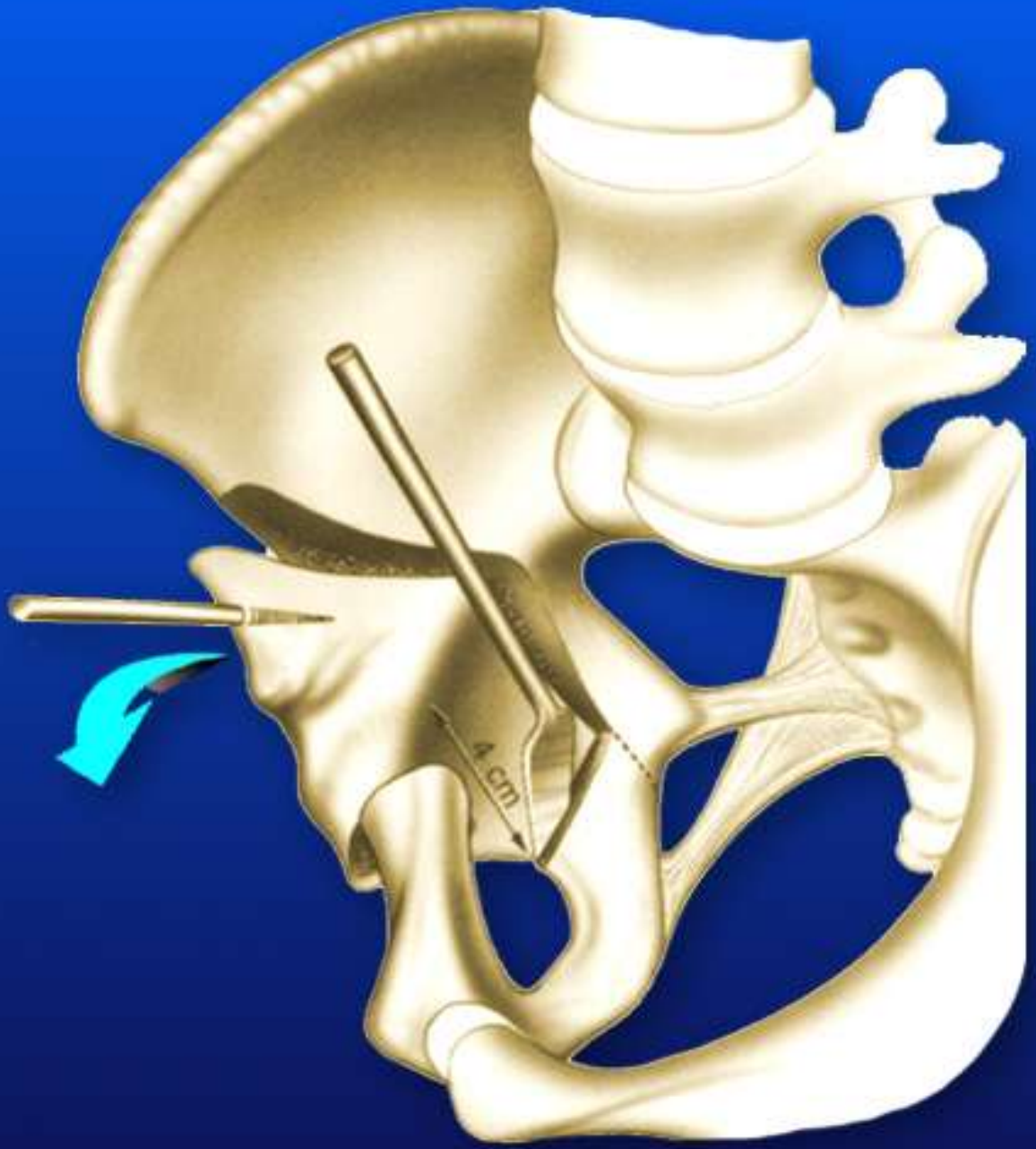


The Surgical Management of
HIP DYSPLASIA
After Walking Age

PAO

Outcome

- 887 PAO
- 42 THA
- Mean interval : 8.2 years
- 87% had grade II or III arthritis at PAO
- More than 10 years of symptom relief for 85%

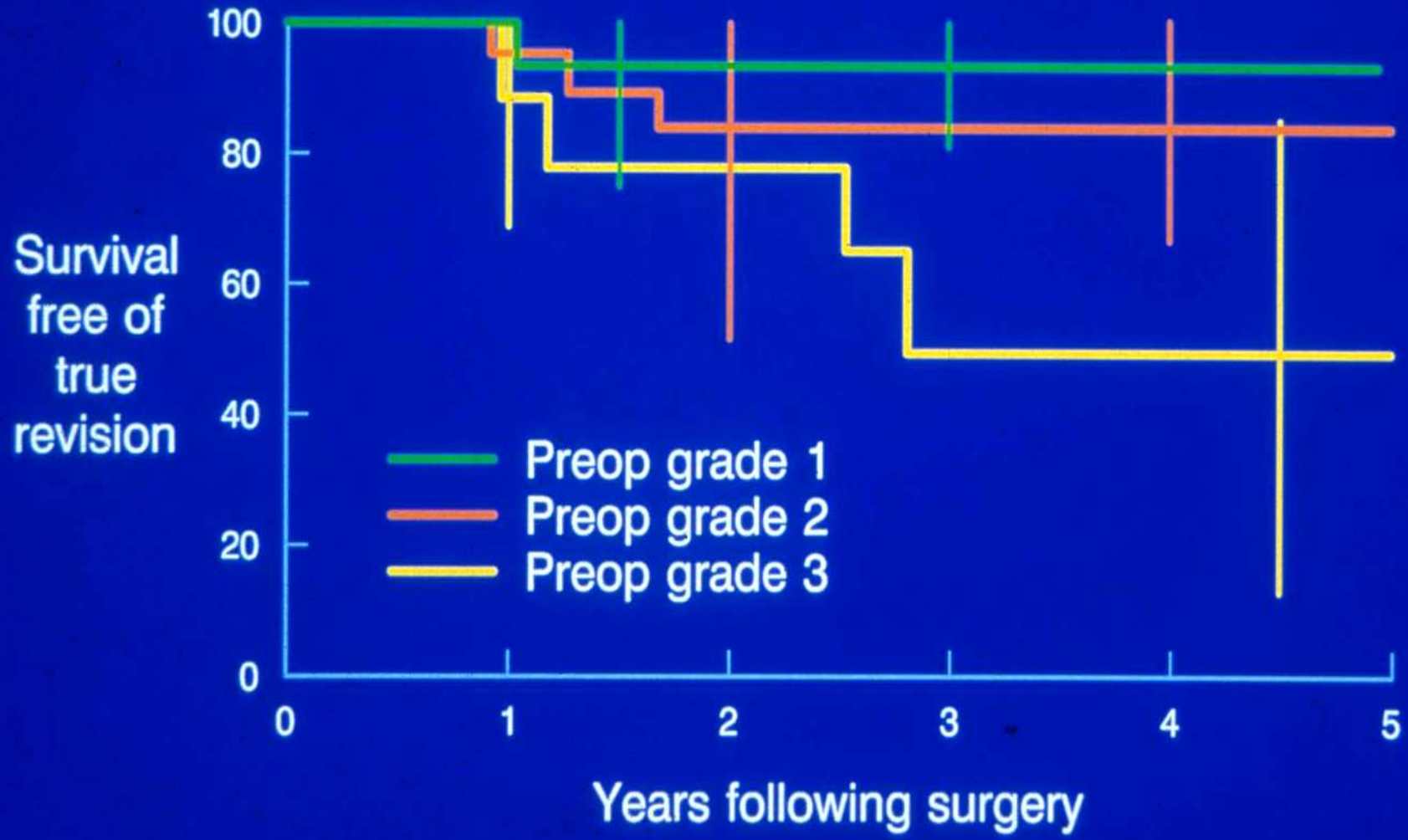
Parvizi J. Ganz R.: Clin Orthop 2003

PAO

Outcome

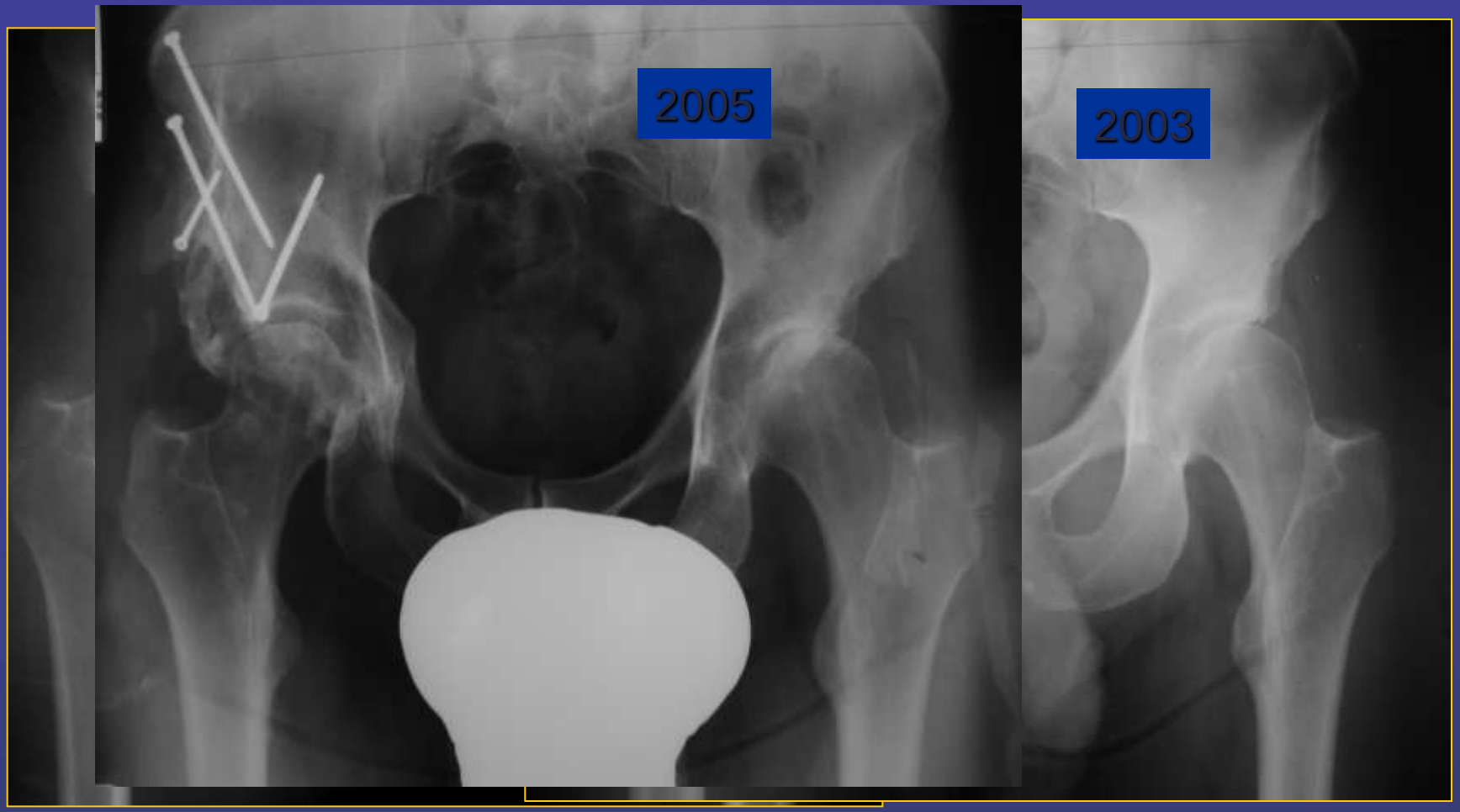
- Proficiency in correction
- Labral pathology
- Pre-existant arthritis

Survival Free of True Revision by Preop Grade



PAO

Outcome



- Благодарю за внимание