

# Open reduction

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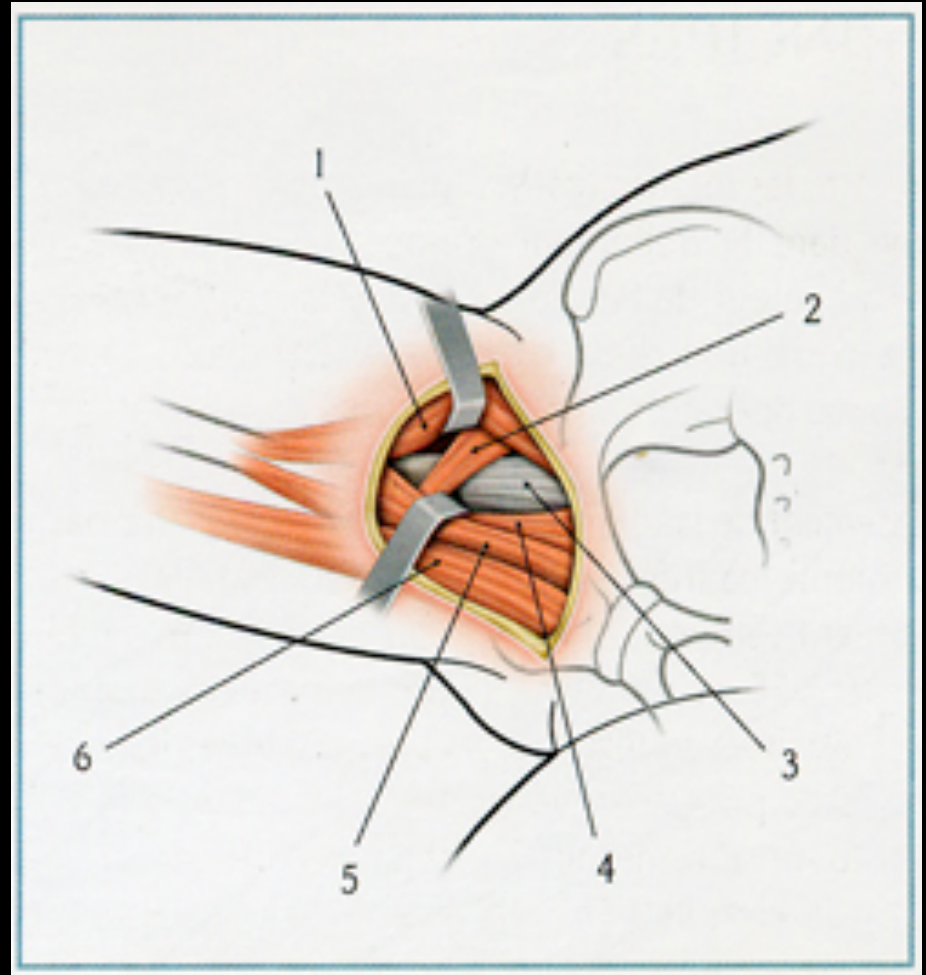
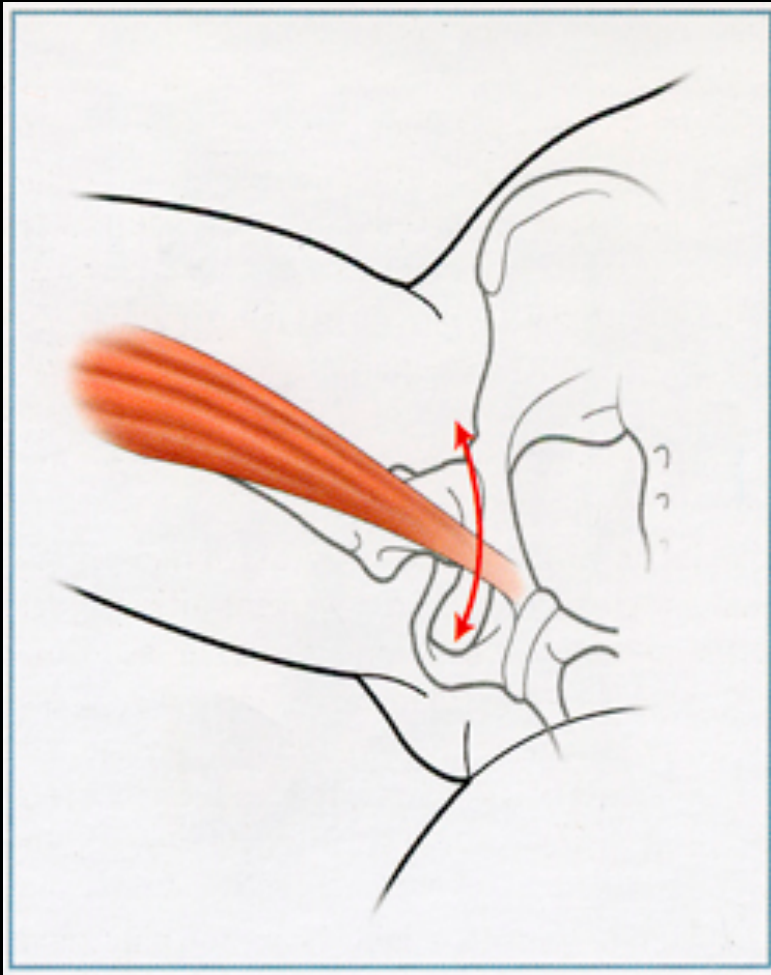


# Indication of open reduction

Failure of conservative methods



# Medial approach Ludloff, 1908



Alternative to conservative treatment

# Indication of open reduction

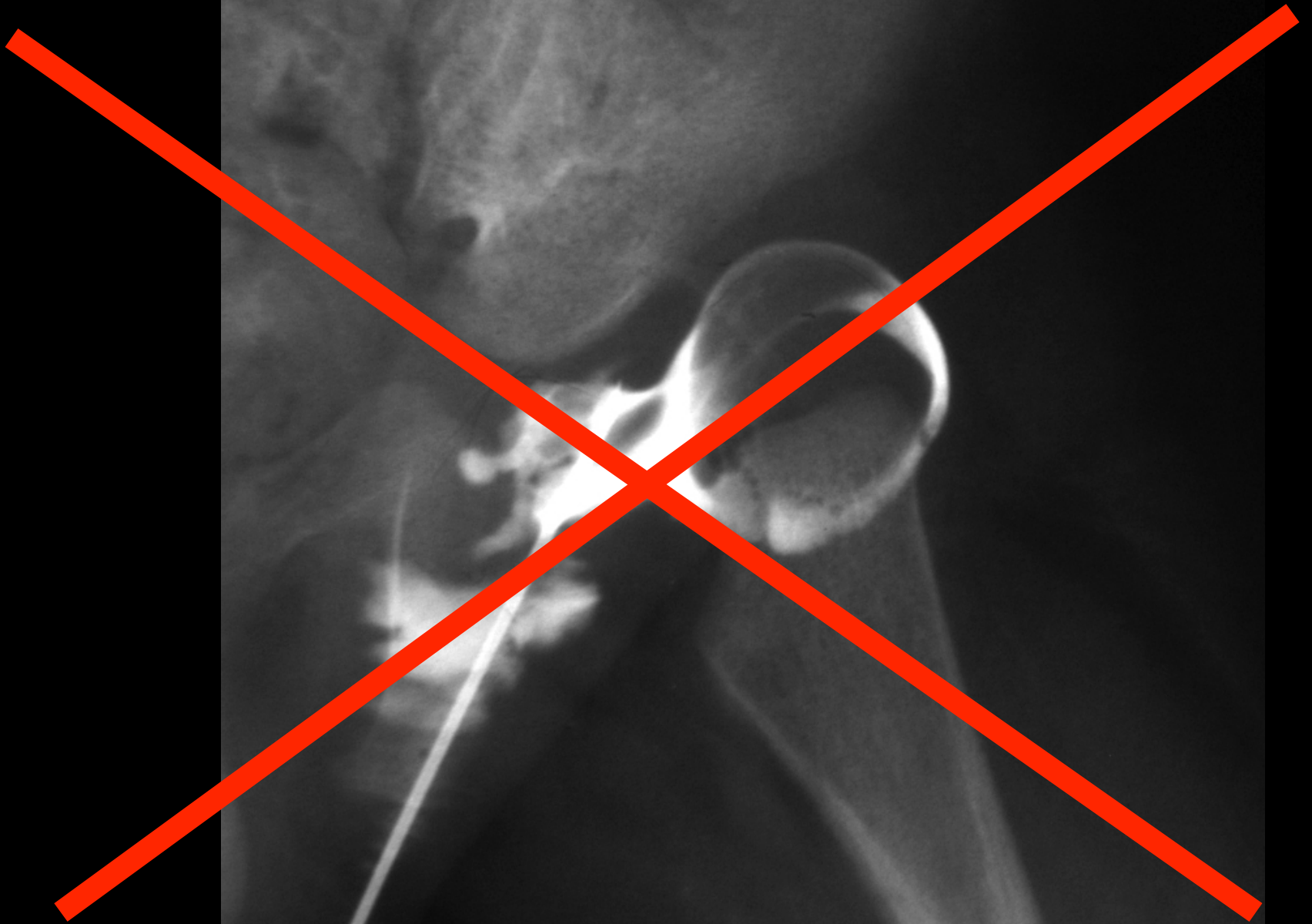
## Irreducibility

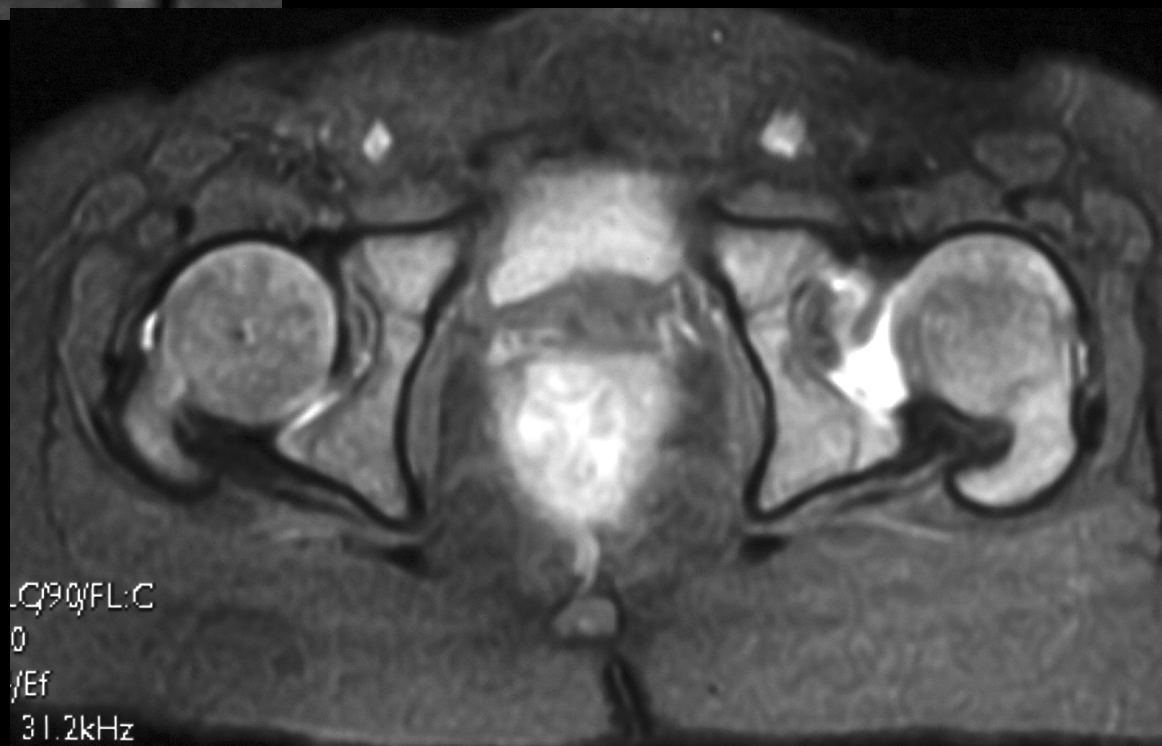
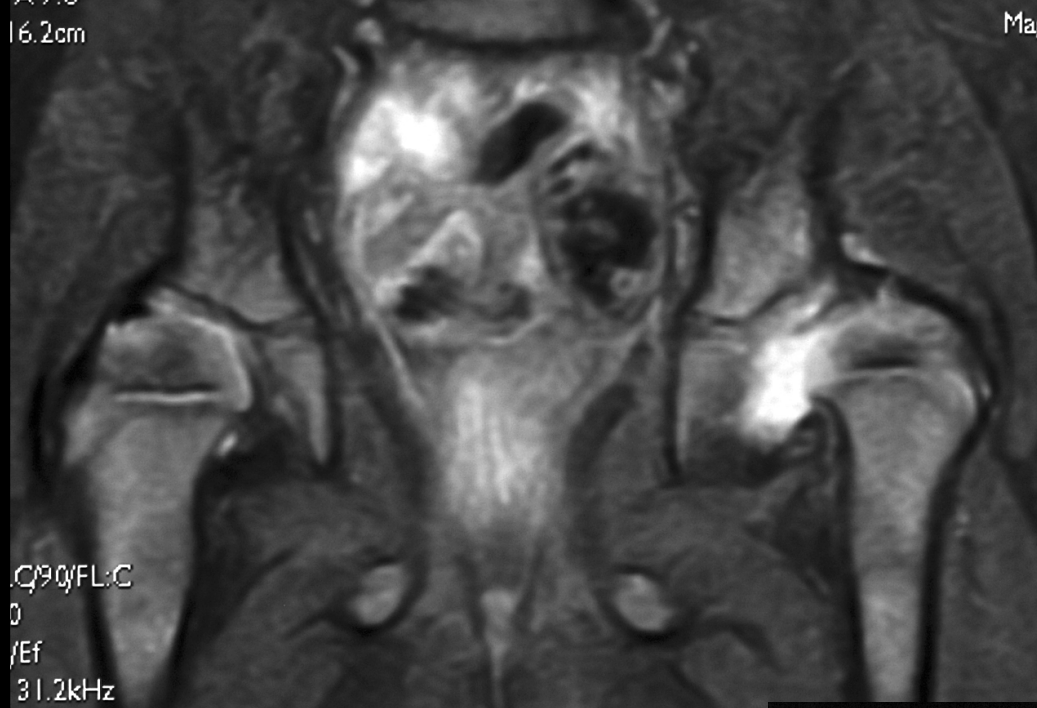
- At birth
- Failure of conservative treatment

*Wicart et al. Open reduction after failure of conservative treatment for congenital dislocation of the hip initiated before the age of six months. RCO 2003,94:119-124*

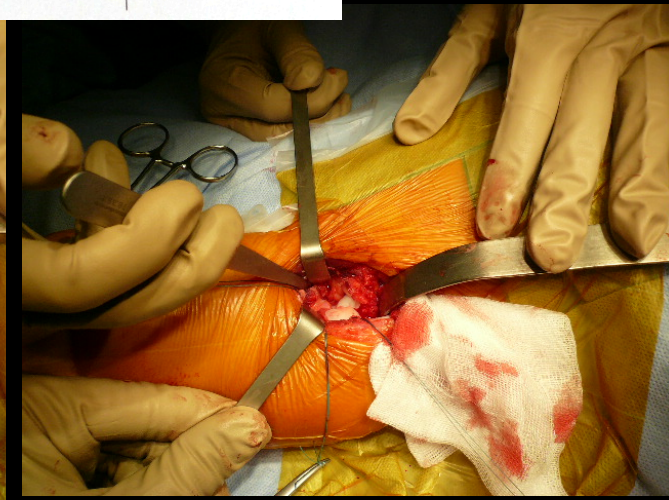
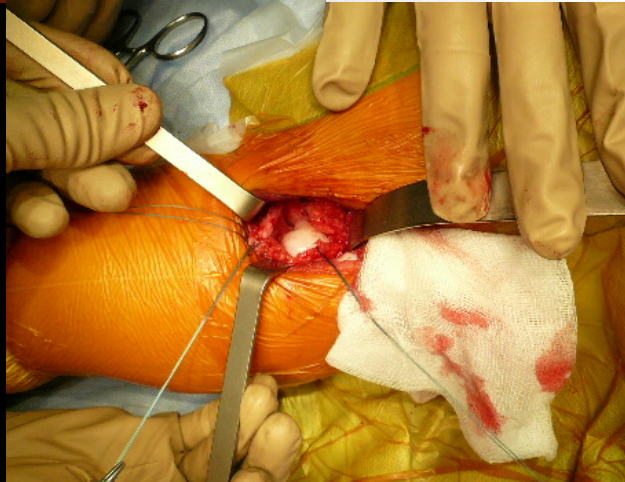
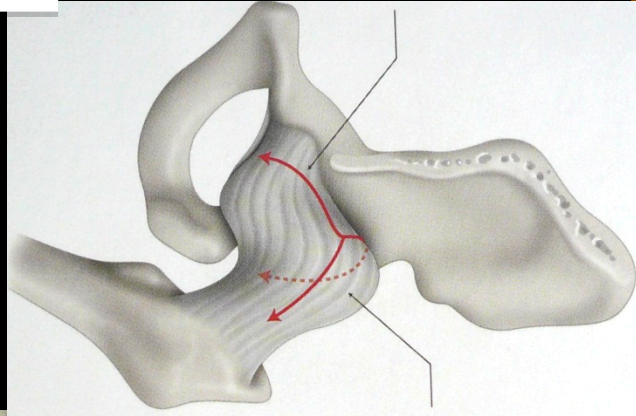
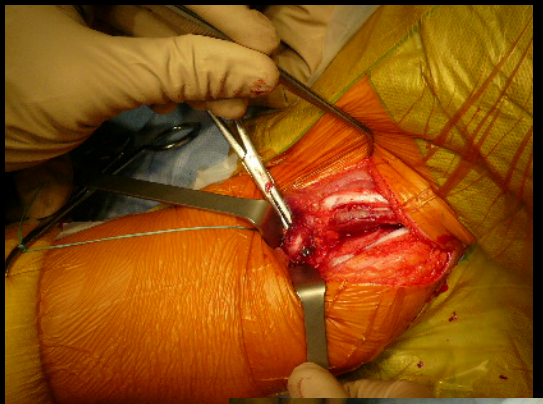
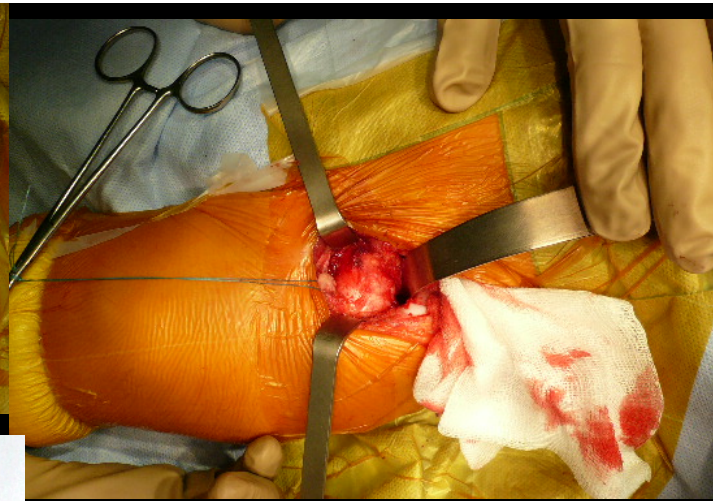
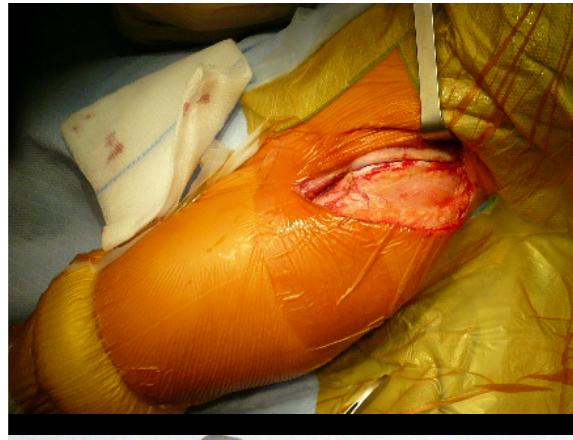
**18 months old**







# Technique chirurgicale



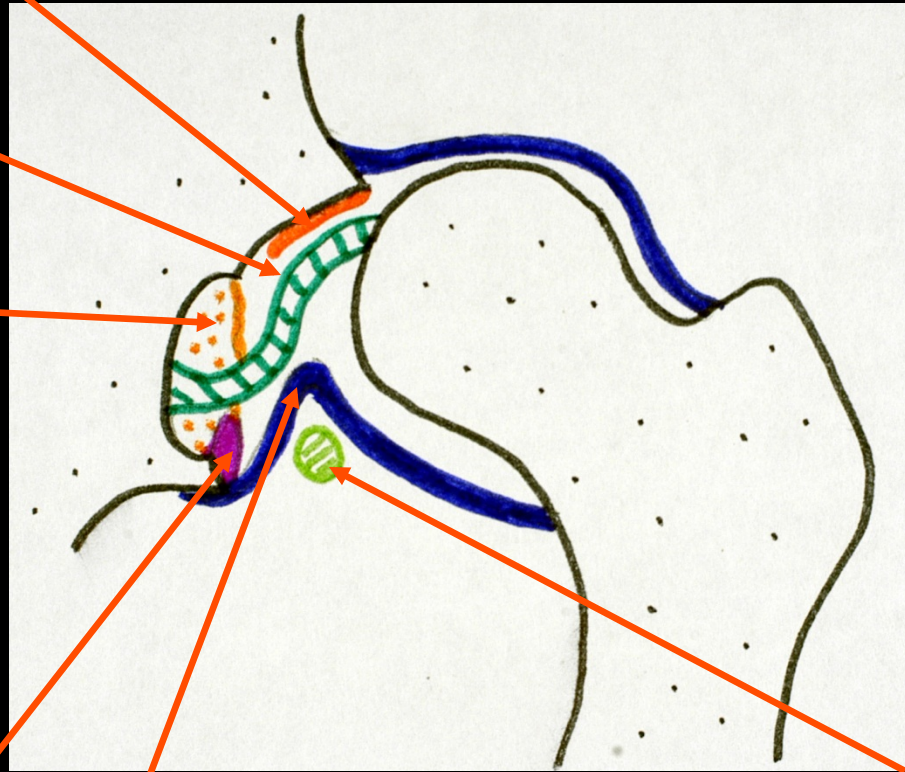


# Intra-articular surgery

Inverted limbus

Teres ligament

Pulvinar

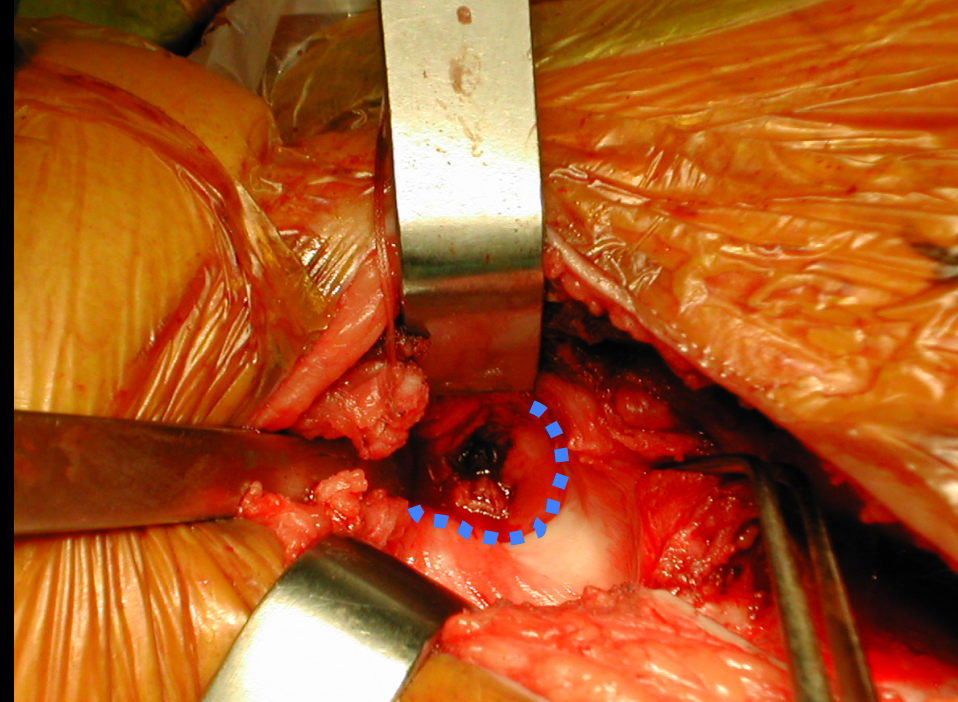


Iliopsoas tendon

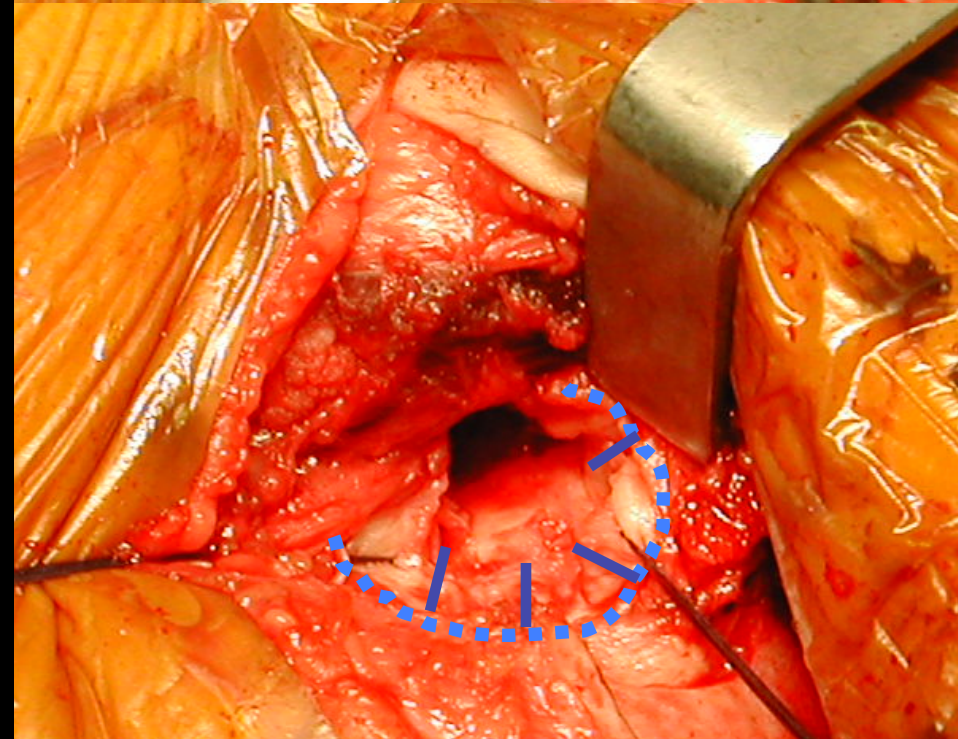
Inferior capsular fold

Transverse ligament of the acetabulum

Inverted limbus



Radiar incisions and  
eversion of the limbus



# Femoral osteotomy *(Chesnut, 1975)*

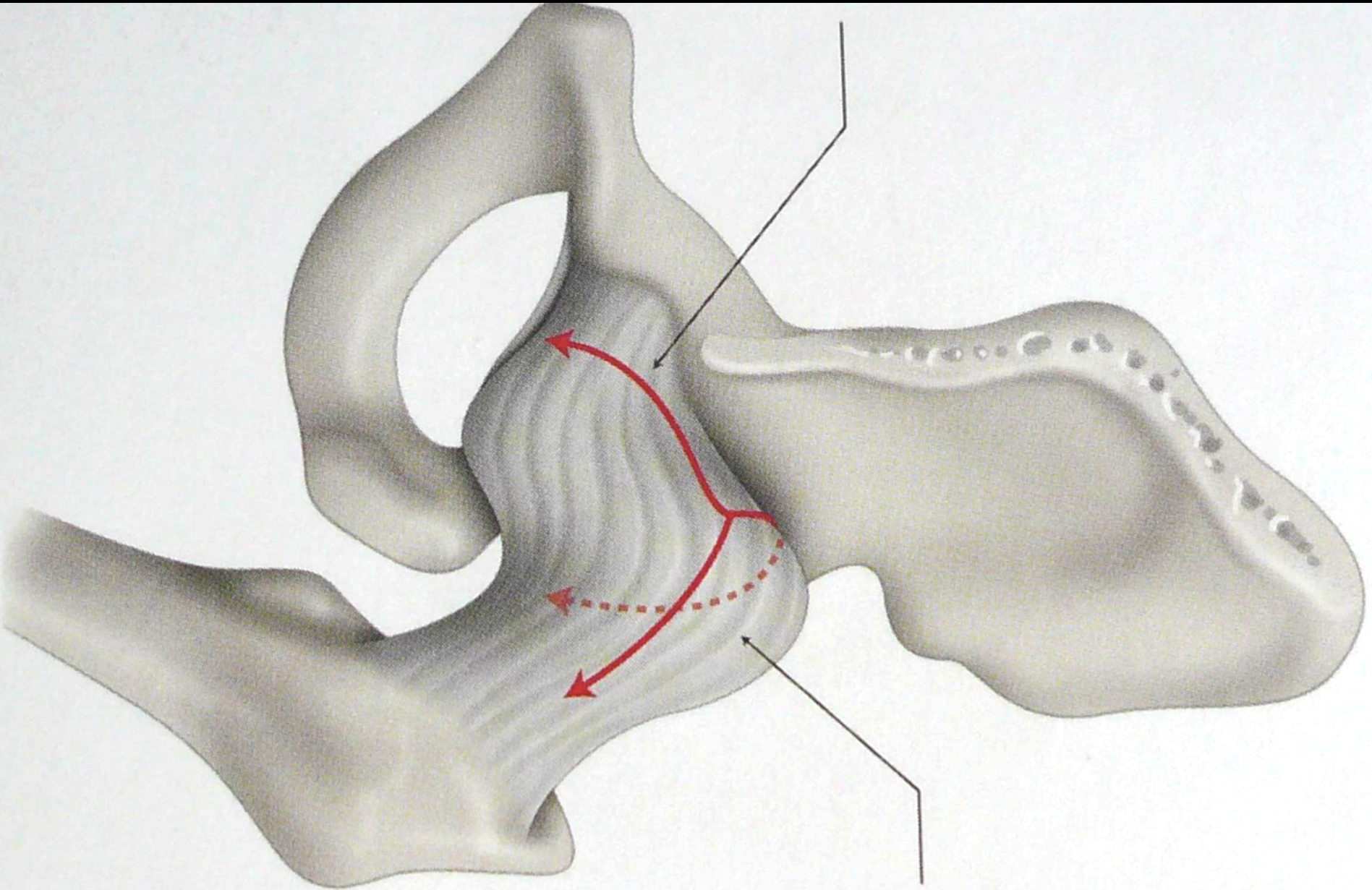
Derotation = decreases anteversion

Varisation = prevents redislocation

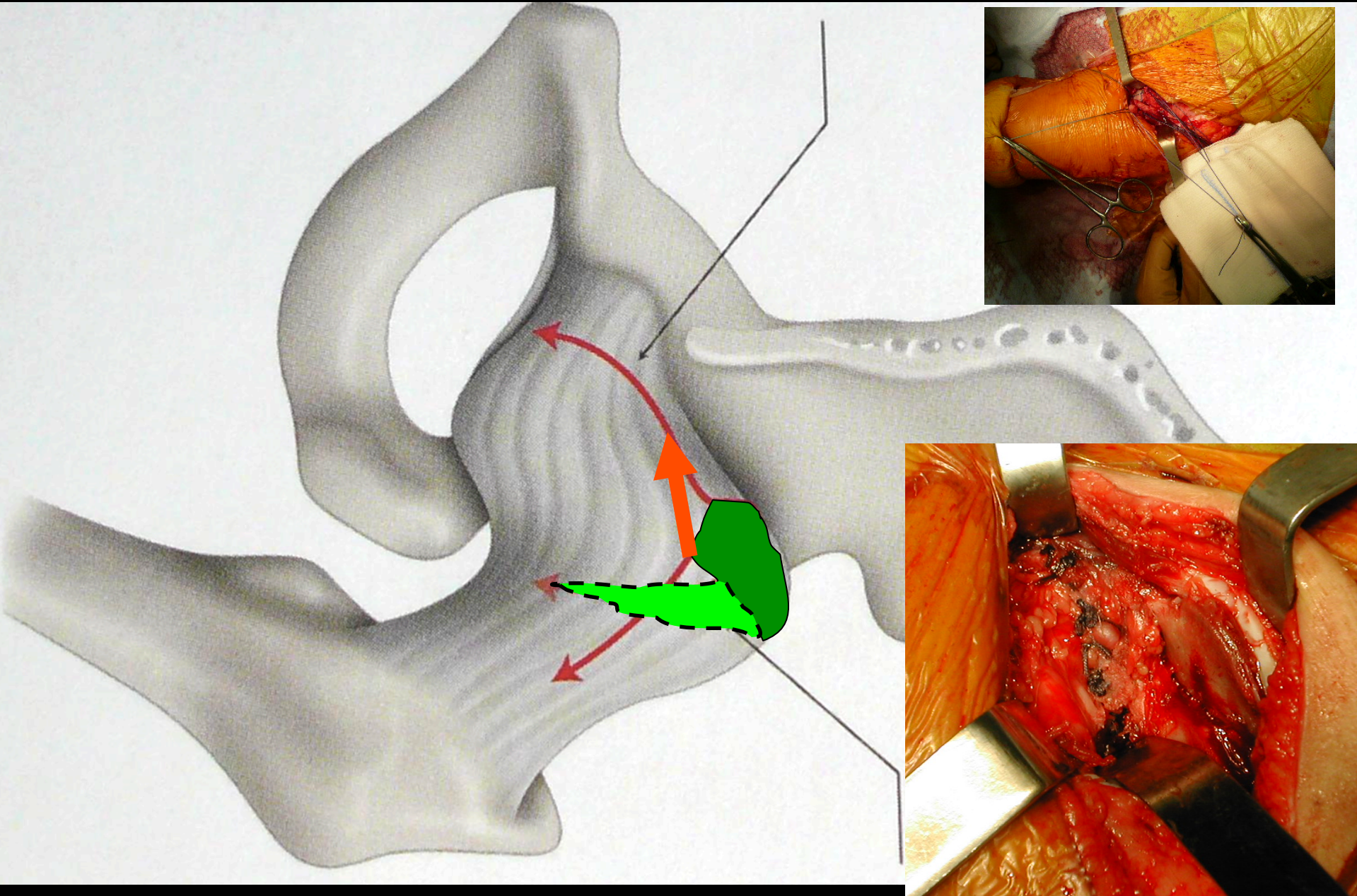
Shortening = Reduction of the rate of AVN



# Capsulorrhaphy



# Capsulorrhaphy



# Pelvic osteotomy ?

Mandatory only in case of instability relative to acetabular dysplasia

## Stability

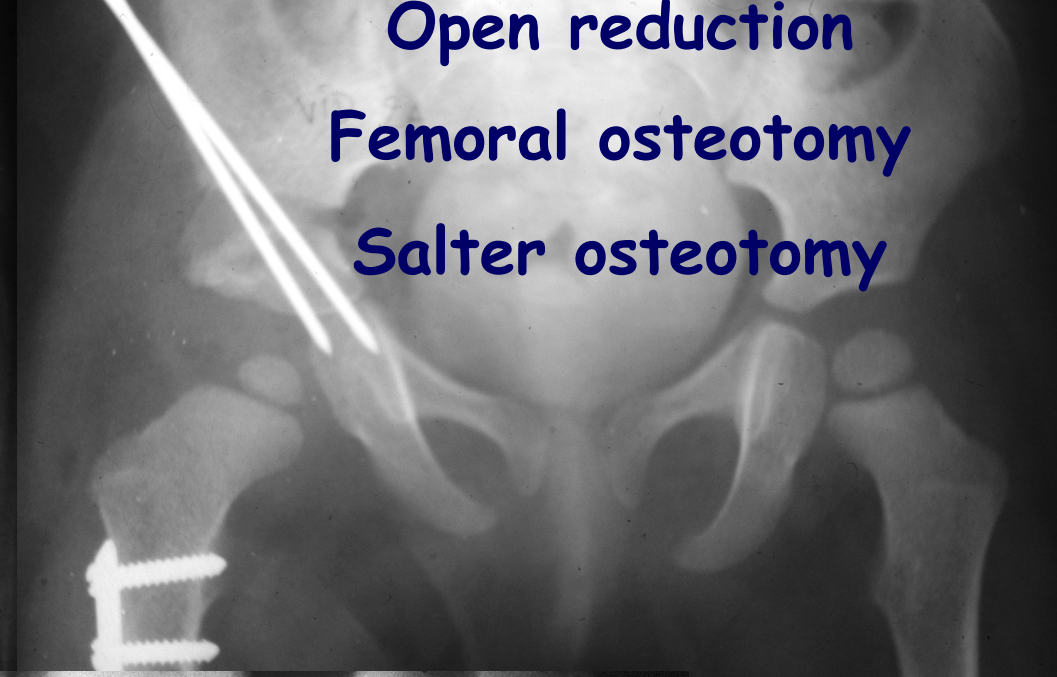
« Succion » or « kiss » noise

Pelvic osteotomy required

*Wicart et al. RCO 2003, 94 : 119-124*

# Post-op immobilization (6 weeks)







# Difficult case

3.3 yo (2 previous open reductions)





OR +  
Salter osteotomy +  
Femoral osteotomy



14 yo

This is an anteroposterior (AP) radiograph of a 14-year-old patient's pelvis and femurs. The image shows the bony structures of the pelvis, including the iliac, ischial, and pubic rami, and the proximal femurs. The text "14 yo" is overlaid in the center of the image, indicating the patient's age. The radiograph shows a large, well-defined, lytic lesion in the anterior aspect of the right ilium, which is characteristic of a bone tumor. The lesion is roughly oval in shape and has a somewhat irregular, but well-circumscribed border. The surrounding bone appears relatively normal, with no obvious signs of metastatic disease or other significant abnormalities. The femurs are also visible, showing normal bone density and structure.

# Complications

## Re-dislocation

*Kershaw et al. Revision of failed open reduction of congenital dislocation of the hip. J Bone Joint Surg [Br] 1993;75-B: 744-9*

- *High rate of AVN*

- *Poor morphology*

## Avascular necrosis

**10%**

*Wicart et al. Open reduction after failure of closed treatment for congenital hip dislocation : Indications and results. RCO 2003,89 : 115 - 24*

## Stiffness

## Osteo-arthritis

*Thomas SR, Wedge JH, Salter RB. Outcome at forty-five years after open reduction and innominate osteotomy for late-presenting developmental dislocation of the hip. J. Bone Joint Surg. [Am] 2007;89:2341-50.*

*Total hip replacement > 40% at 45 years follow-up*

# Conclusions

Step by step procedure

Each step is important

Good short and mid-term results

Long term result ?

*Precocious osteoarthritis*

Advantage to closed reduction at mid-term

