

# Implication de la coxo-fémorale : Le conflit antérieur de hanche

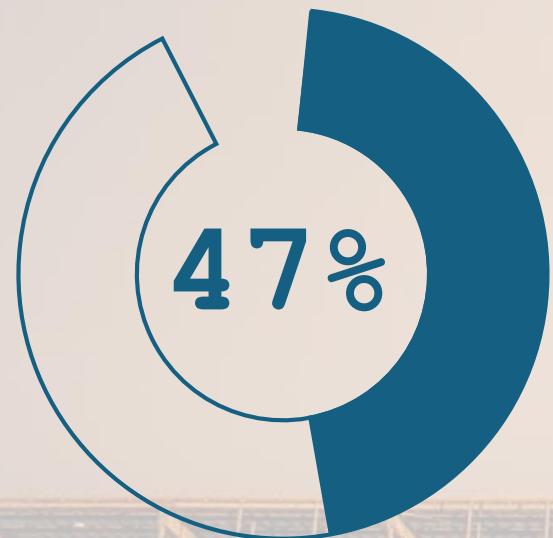
Dr Thomas Gicquel

Chirurgie de la hanche & du genou  
Clinique Mutualiste de la Porte de l'Orient



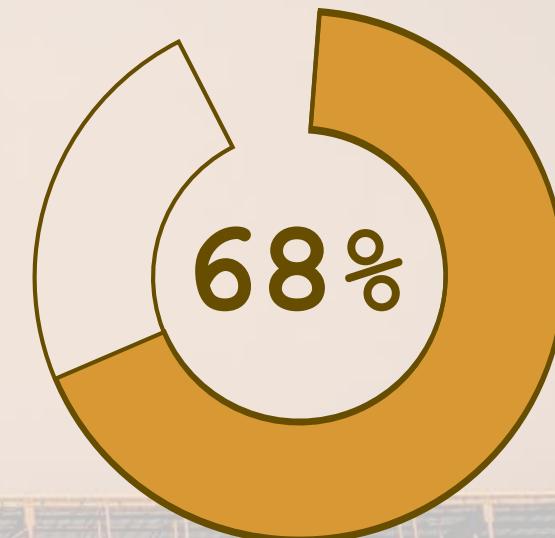
CLINIQUE MUTUALISTE  
DE LA PORTE DE L'ORIENT  
GROUPE vyv

Dans la population générale



Morphologie  
type came

Chez les joueurs  
de football « élite »



Morphologie  
type came



# Etiologies d'une douleur inguinale ?

1

Conflit fémoro  
acétabulaire

32 %

2

Pubalgie

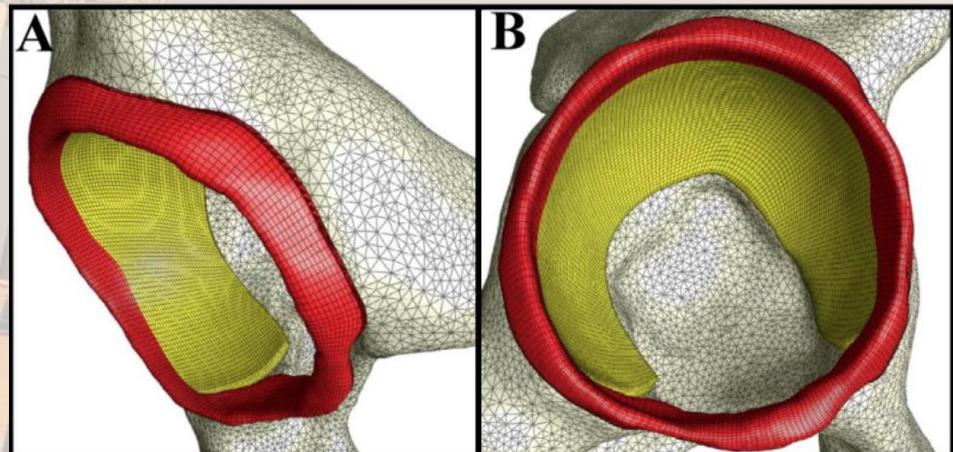
24 %

3

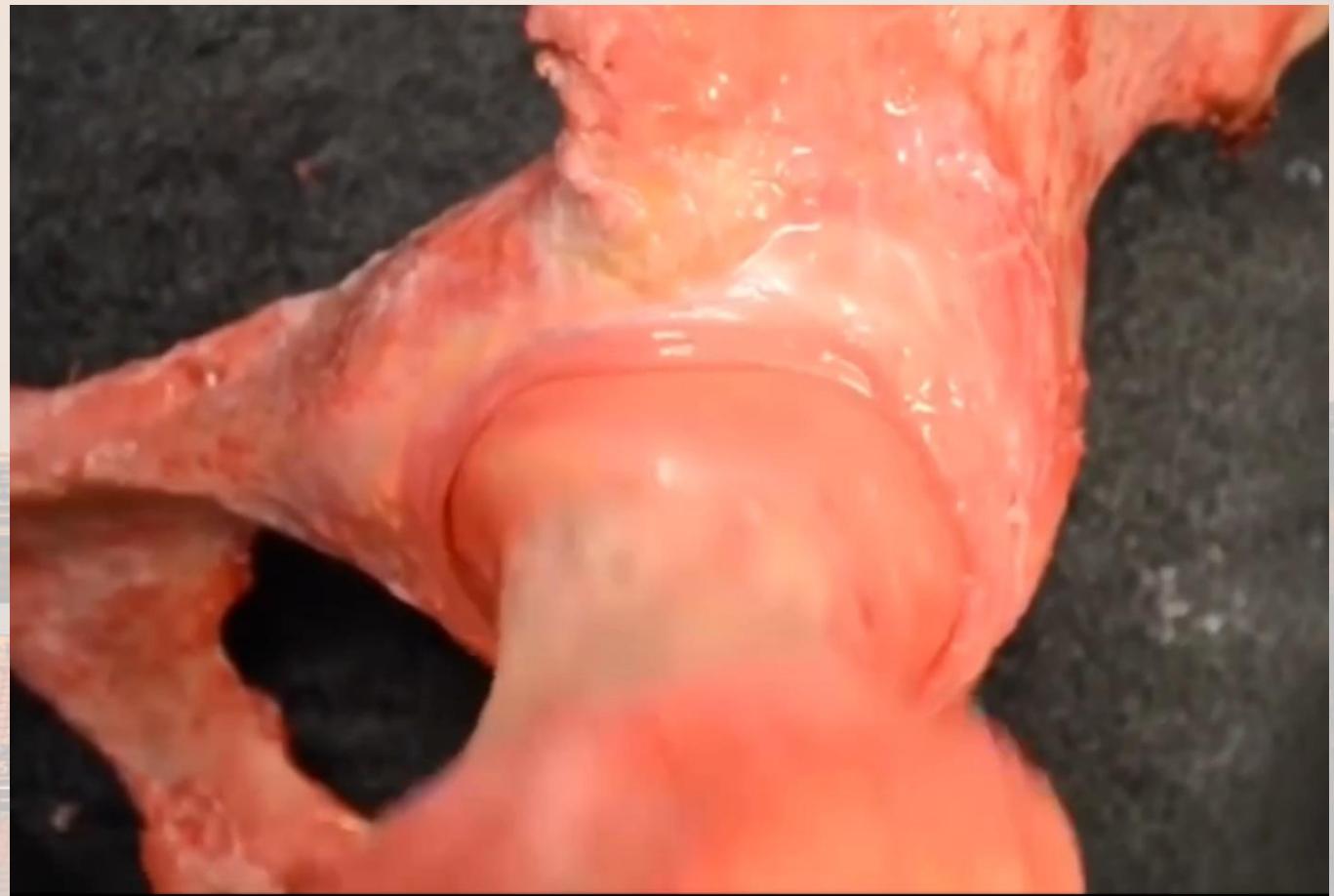
Pathologie des  
adducteurs

12 %

# Labrum = joint d'étanchéité

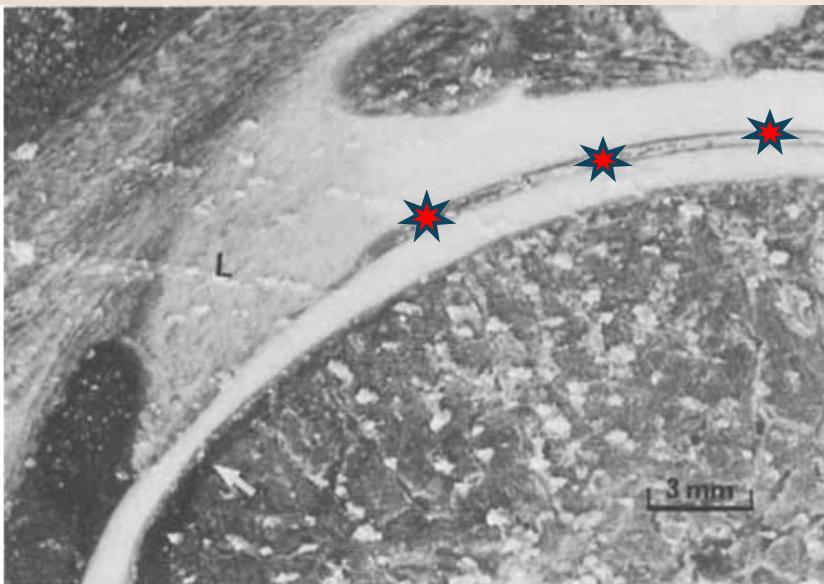


Henak J Biomech 2011

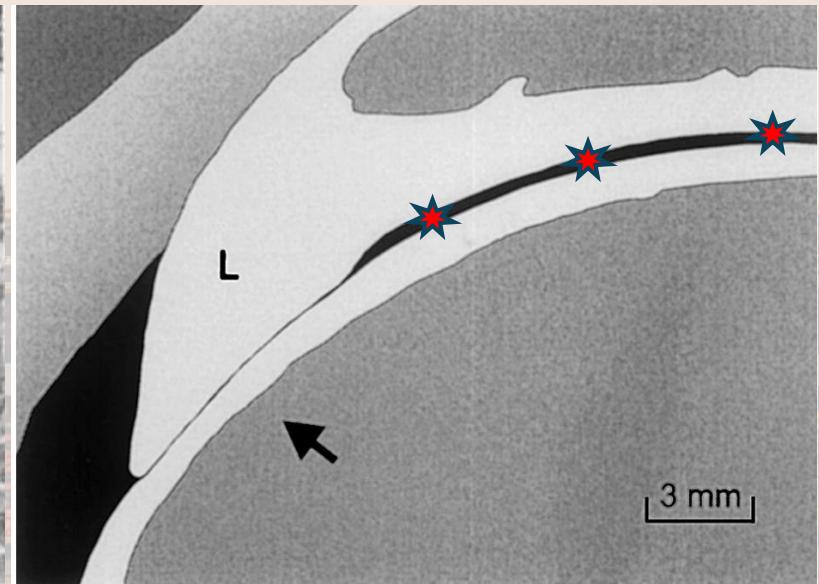


@chicagosportsdoc

# Labrum = joint d'étanchéité

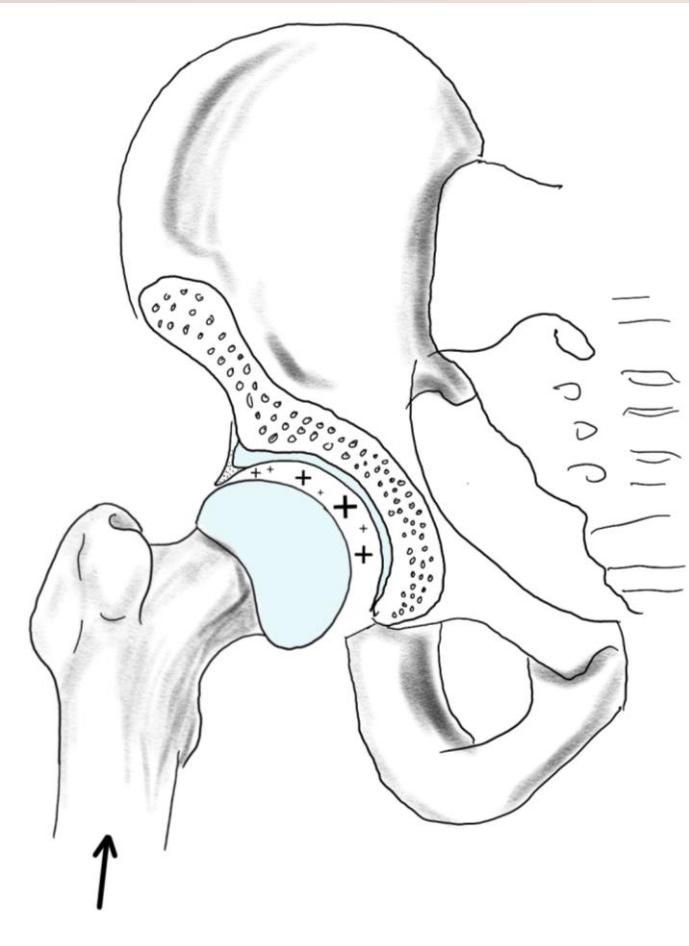


Terayama Eng Med 1980



Ferguson Clin Biomech 2000

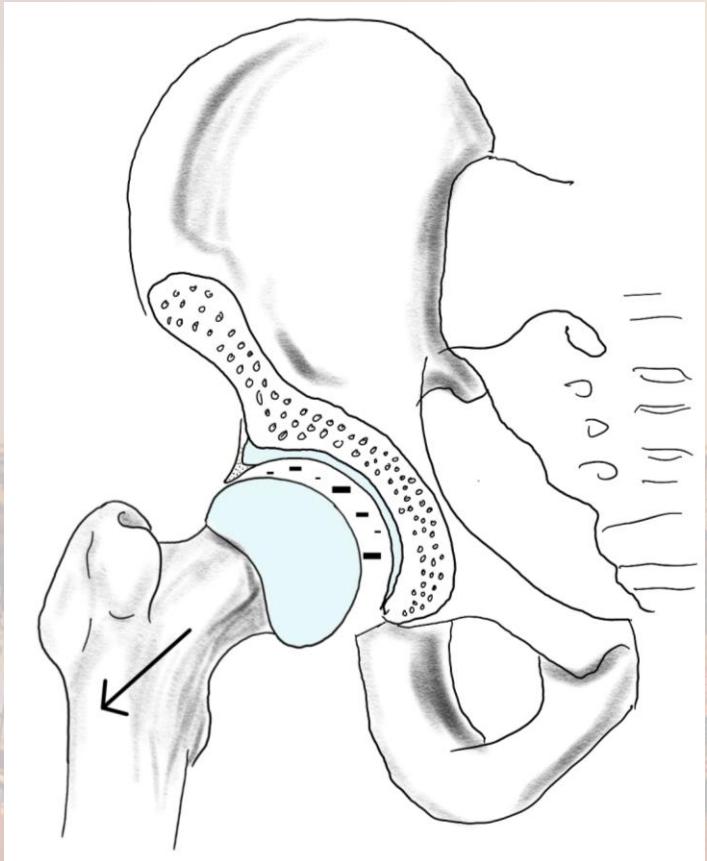
# Labrum = joint d'étanchéité



Ferguson J Biomech 2003

**Compression / Appui**  
-> répartition des  
contraintes

# Labrum = joint d'étanchéité



**Distraction / Décoaptation**

→ lutte contre le déplacement

# CONFLIT

FEMORO



ACETABULAIRE



SUMMIT  
ORTHOPEDICS

Hip Preservation and Arthroscopy

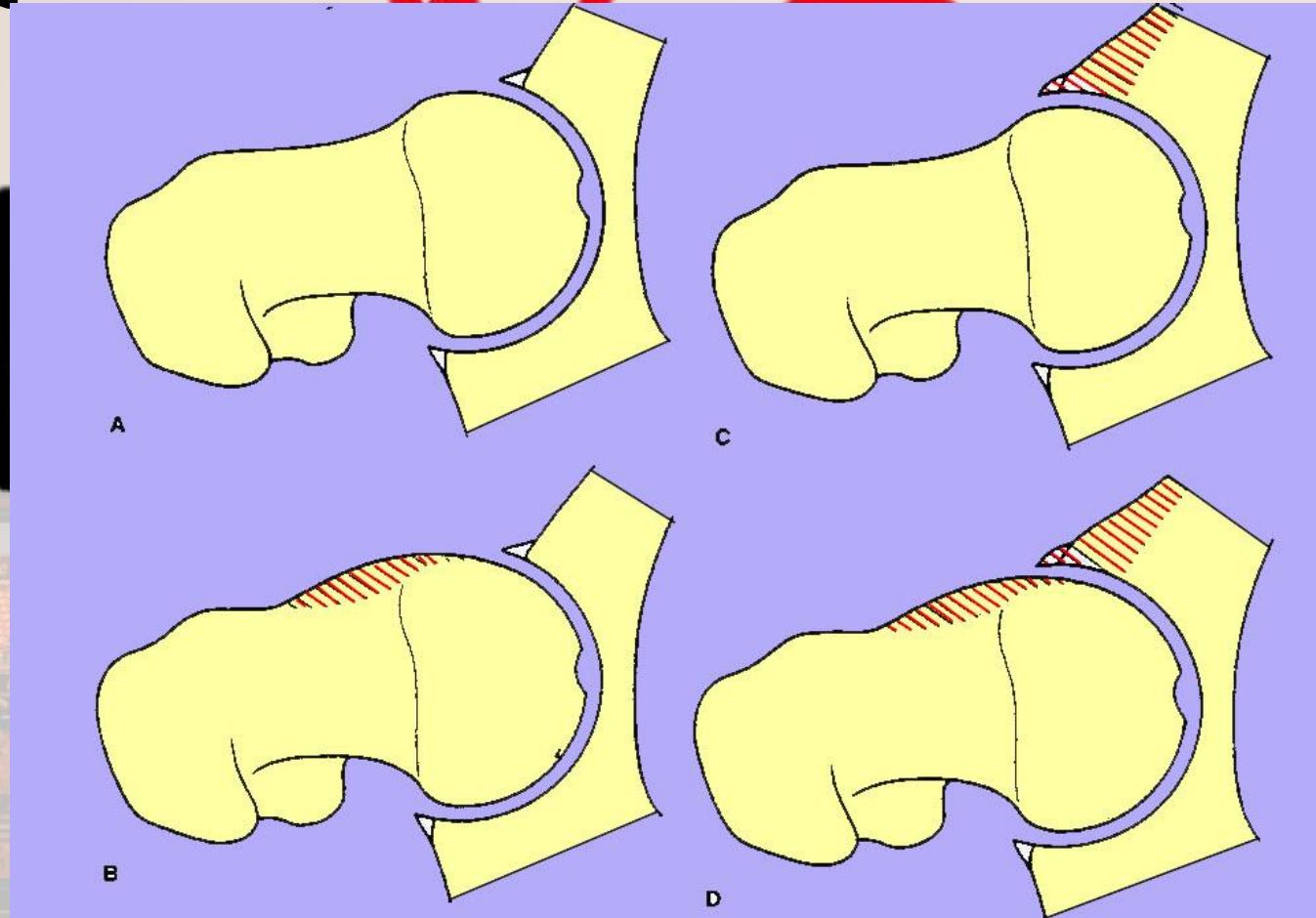
Pincer-type Femoroacetabular Impingement (FAI)

Jack G. Skendzel, M.D.

# CONFLIT

FEMORO

ACETABULAIRE

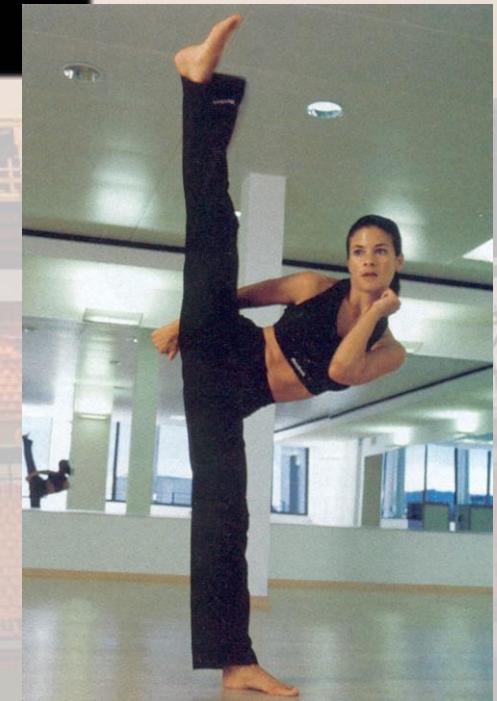


Lavigne et al clin orth

# CONFLIT

FEMORO

ACETABULAIRE



# Quelles douleurs ?

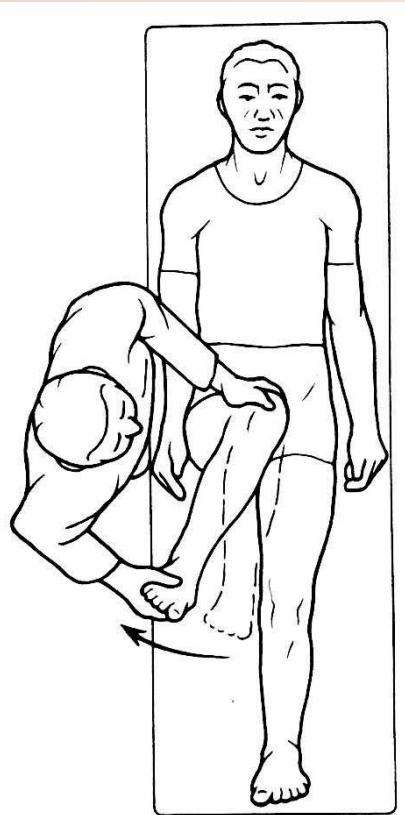


- C-sign
- Inguinales
- Tendinites réactionnelles

# L'examen clinique ?

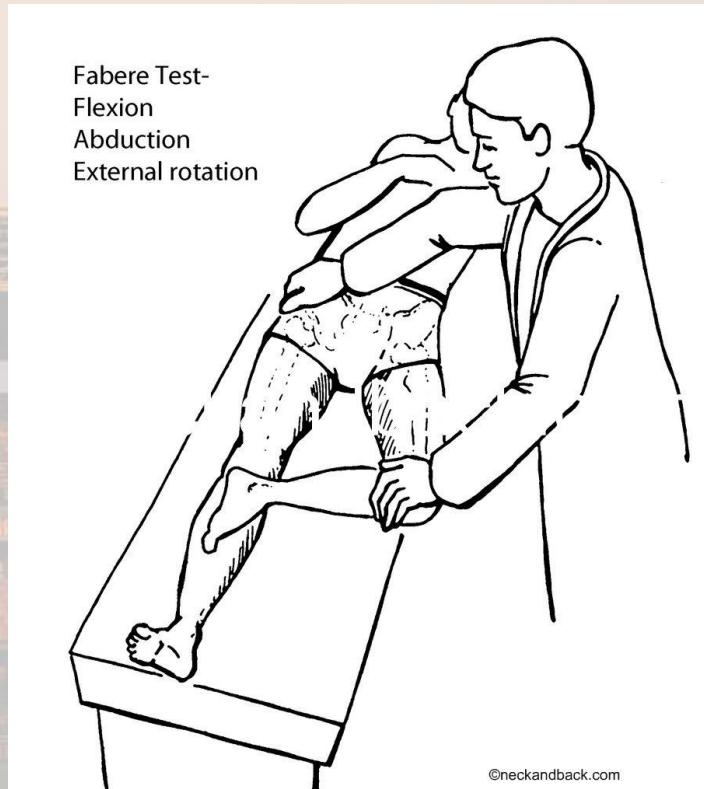
FADIR

Flexion ADduction Internal  
Rotation



FABER

Flexion ABduction External  
Rotation



Fabere Test-  
Flexion  
Abduction  
External rotation

# L'imagerie ?

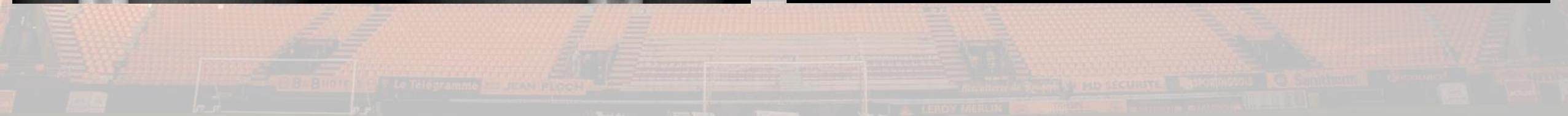
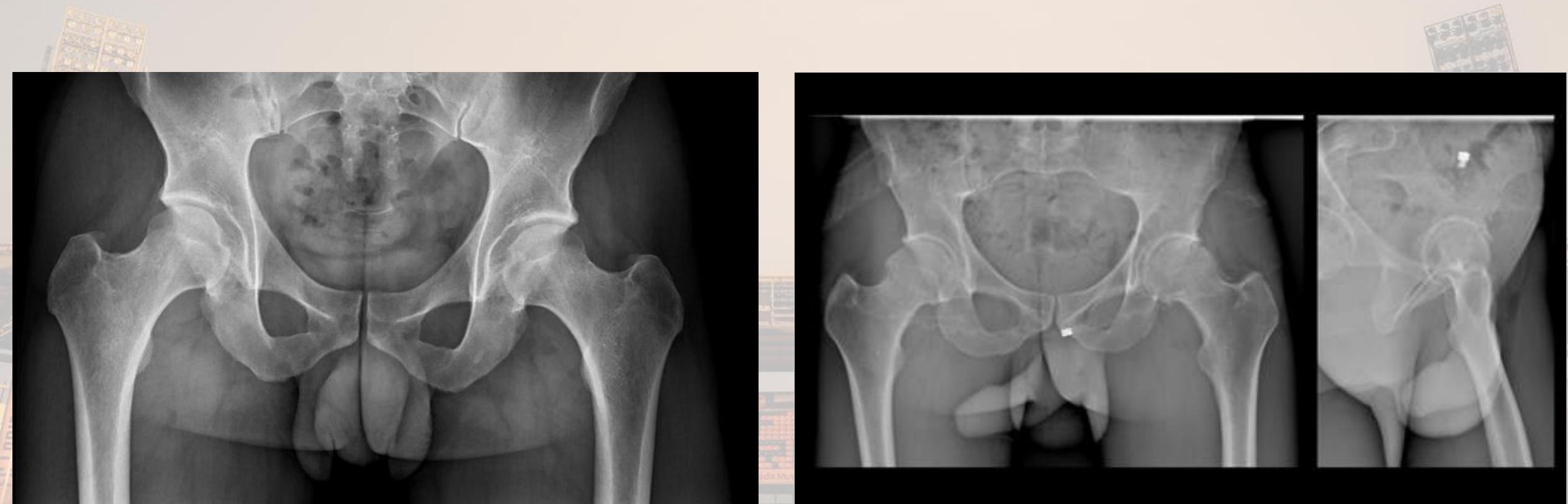
IRM



TDM



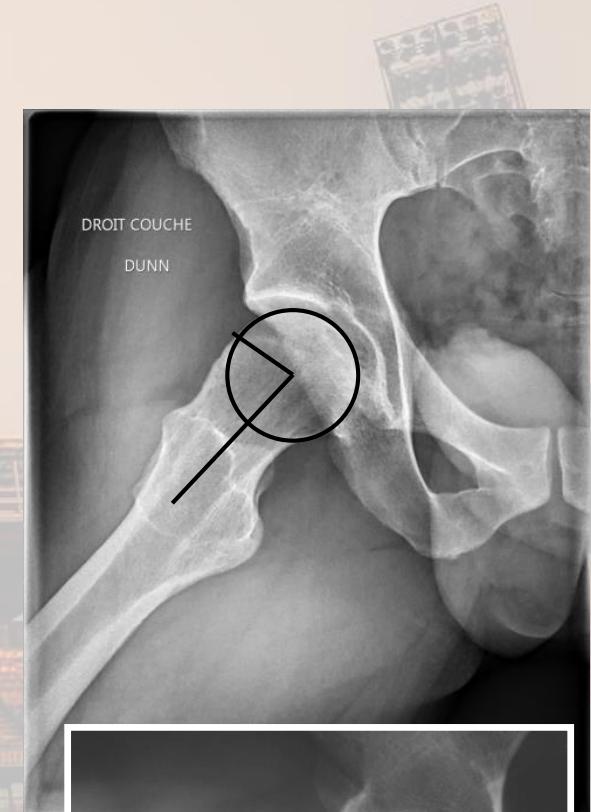
# L'imagerie ?





# L'imagerie

? Orientation acétabulum  
Couverture acétabulaire  
Came



# L'imagerie ?



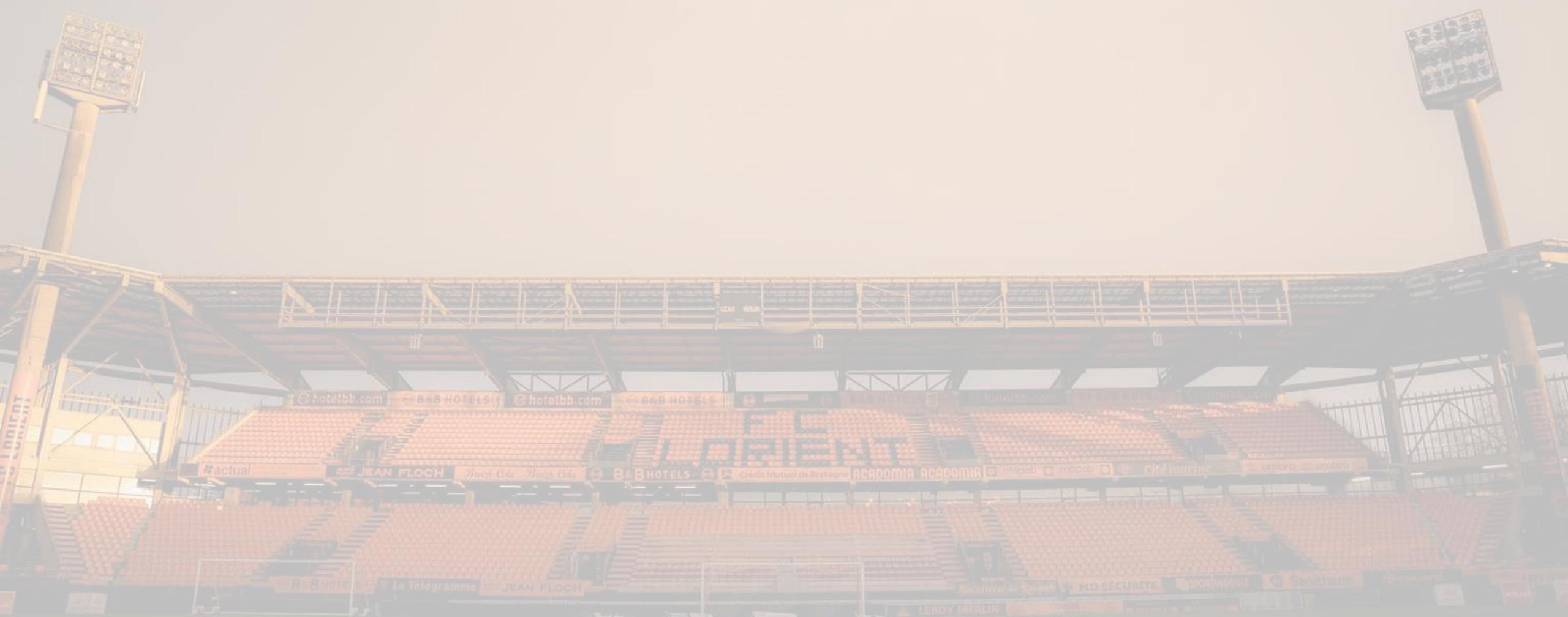
# Le traitement

- Physiothérapie
- Médical conservateur : Injections
- Chirurgical conservateur : Arthroscopie
- Arthroplastie = prothèse

De plus  
en plus  
invasif



# Anterior Pelvic Tilt

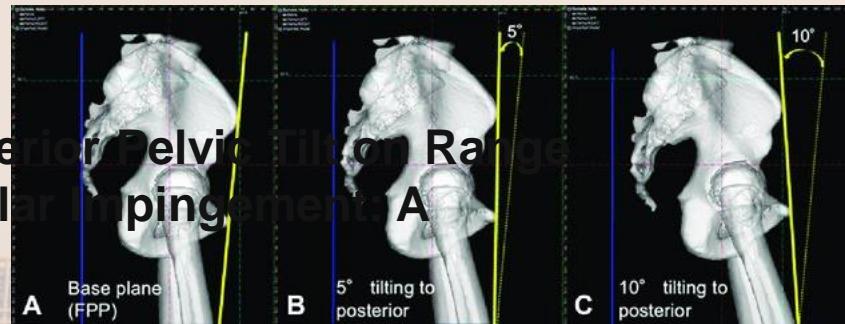


## **Effect of Decreasing the Anterior Pelvic Tilt on Range of Motion in Femoroacetabular Impingement: A Computer-Simulation Study**

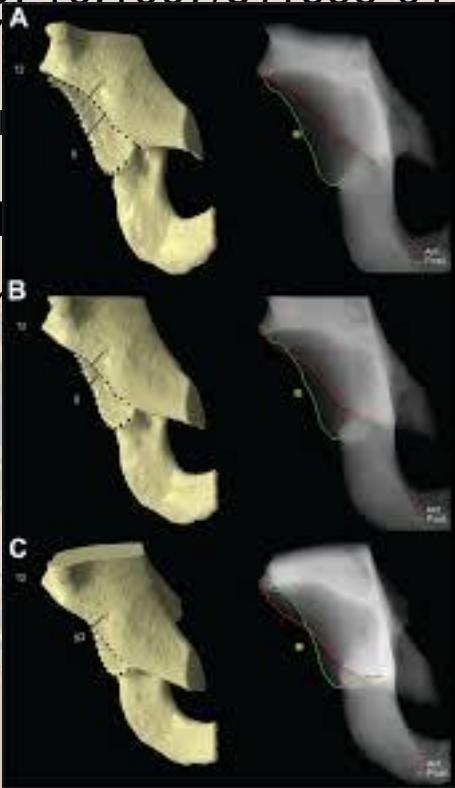
- April 2021
- [Orthopaedic Journal of Sports Medicine](#) 9(4):232596712199946

- DOI:  
[10.1177/2325967121999464](https://doi.org/10.1177/2325967121999464)

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- [Naomi Kobayashi](#)
- [Shota Higashihira](#)
- [Haruna Kitayama](#)



- Clin Orthop Relat Res (2015) 473:1267–1273 and Related Research®
- DOI 10.1007/s11999-014-4104-x A Publication of The Association of Bone and Joint Surgeons® SYMPOSIA AND MEETINGS  
THE 2014 AMERICAN ACADEMY OF HYPERTROPHIC PELVIC FEMORAL SPONGE HIP SYMPOSIUM
- Full Text PDF Available at [www.jbmj.com](http://www.jbmj.com) Fundus Orientation Varies Between Supine and Standing Radiographs: Implications for Clinical Decision Making in the Evaluation of Femoral Spingement
- Journal of Bone and Joint Surgery (JBJS) • Volume 97-A • Number 10 • October 2015 • Pages 1267–1273 • Authors: James P. Tannenbaum MD, Jeffrey J. Nepple MD, Bryan T. Kelly MD, Christopher M. Bedi MD

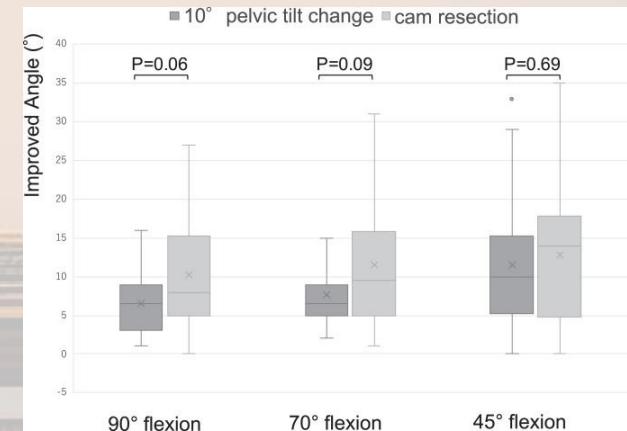


- Anterior pelvic tilt (10° change) resulted in a decrease in internal rotation in 90° of flexion of 5.9° ( $P < .0001$ ) and internal rotation in 90° of flexion and 15° adduction of 8.5° ( $P < .0001$ )
- **Effect of Changes in Pelvic Tilt on Range of Motion to Impingement and Radiographic Parameters of Acetabular Morphologic Characteristics**
- James R. Ross, MD [orthodocjimross@gmail.com](mailto:orthodocjimross@gmail.com), Jeffrey J. Nepple, MD, [...], and Asheesh Bedi, MD+3 [View all authors and affiliations](#)
- [Volume 42, Issue 10](#)
- <https://doi.org/10.1177/0363546514541229>

# Protocole physiothérapie

- Repos sportif
- Traiter les tendinites associées  
Massages profonds etc..
- Renforcement musculaire  
Gainage  
Renforcement des abducteurs et rotateurs externes
- Lutte contre le Tilt pelvien antérieur  
Travails posturaux = Lutte contre l'antéversion de bassin -> diminuer rétroversion acétabulaire  
Assouplissement des ischio jambiers
- Éviter les étirements excessifs  
Travail sur le psoas et sur les adducteurs
- Apprentissage de l'auto rééducation

« Anterior pelvic tilt »



Kobayashi Orthop J Sports  
Med. 2021



## Training-induced changes in anterior pelvic tilt: potential implications for hamstring strain injuries management

Jurdan Mendiguchia, Angel Gonzalez De la Flor, Alberto Mendez-Villanueva, Jean-Benoît Morin, Pascal Edouard & Mirian Aranzazu Garrues

Table 1. Description of multimodal intervention programme.

CONTENT	PHASE I: week 1–3, session 1–9	PHASE II: week 4–6, session 10–18
MANUAL THERAPY	Lumbar Z-Joint mobilization Lumbar soft tissue massage Latissimus dorsi release	Lumbar Z-Joint mobilization Lumbar soft tissue massage Latissimus dorsi release
MOBILITY	Hip flexor flexibility with retroversion 4 reps x 15 Hamstring wall flexibility 4 reps x 15 Rock back with retroversion (push wall) 2 × 8 reps (5") Cat-camel (retroversion emphasized) 2 × 10 reps Lower back + adductor stretch 4 reps x 15 Thoracic spine open book 2 × 8 reps Thoracic extension roller 2 × 12 reps TRX Overhead squat 6 reps (deep breaths) Breathing in lumbar flexion 6 reps (deep breaths) Standing glute squeeze 2 reps x20 " (On-Off)	Hip flexor flexibility + pull down 4 reps x 15 Hamstring dynamic mobility + contralateral psoa flexibility 2 × 6 reps Standing W shoulder flexion (with retroversion) 2 × 8 reps Squat Rock 3 × 8 reps Lower back + adductor stretch 4 reps x 15 Half-Kneeling Thoracic spine rotation 2 × 8 reps Thoracic extension Roller 2 × 12 reps TRX Overhead squat 6 reps (deep breaths)
SELF-MASSAGE	Latissimus dorsi foam roller 3 reps x 20 Lumbar foam roller 3 reps x 20" Quadriceps foam roller 3 reps x 20" Iliotibial band foam roller 3 reps x 20	Latissimus dorsi foam roller 3 reps x 20 Lumbar foam roller 3 reps x 20" Quadriceps foam roller 3 reps x 20" Iliotibial band foam roller 3 reps x 20
GLUTEUS MAXIMUS STRENGTH	Glute Bridge (50% BW) 3 × 6 reps Cook hip lift 2 × 6 reps	Hip thrust (70% BW) 3 × 6 reps Pull trough banded 3 × 6 (5") reps Squat + hip banded 3 × 5 reps
HAMSTRING STRENGTH	Kneeling banded bridge 2 × 8 reps (5") Conventional deadlift (30% BW) 3 × 6 reps	Conventional deadlift (40% BW) 3 × 6 reps SL deadlift (10% BW) 3 × 6 reps
LUMBOPELVIC CONTROL	Elevated Hamstring Bridge (30% BW) 2 × 8 reps Abdominal crunch + retroversion 3 × 5 reps (5") Long lever prone plank 2 × 8 reps (5") Reverse crunch 3 × 5 reps Dead bug wall press 3 × 5 reps ASLR + pull down 2 × 8 reps Farmer carry 2 × 4 reps (10 m) Isometric abdominal "V" hold 2 × 4 (5") Roll out with fitball 2 × 6 reps	Reverse Crunch with medicine ball 3 × 5 reps Dead bug w/medicine ball and band 3 × 6 reps Scissors 3 × 6 reps Lunge + Palloff Press with hip flexion3x6 reps (3") March technique + medicine ball rotation 5 reps x 10 m Overhead stick march 5 reps x5m Backward resisted walking 2 × 5 reps March technique + barbell rotation 5 reps x10m Extensor-focused march 2 × 5 reps Flexor-focused march 2 × 5 reps Palloff press 2 × 8 reps (5")

reps = repetitions; " = seconds, BW = body weight; SL = single Leg

## 1) Exercices actifs (~80% du temps)

- Mobilisation active lumbopelvienne
- Etirement des fléchisseurs de hanche
- Etirement des Ischio jambiers
- Auto-massage avec foam roller
- Renforcement des extenseurs de hanche (gluteus maximus et ischio jambiers)
- Exercices de contrôle neuromusculaire lombo pelvien focalisés sur le tilt postérieur

## 2) Thérapie manuelle (~20% du temps).

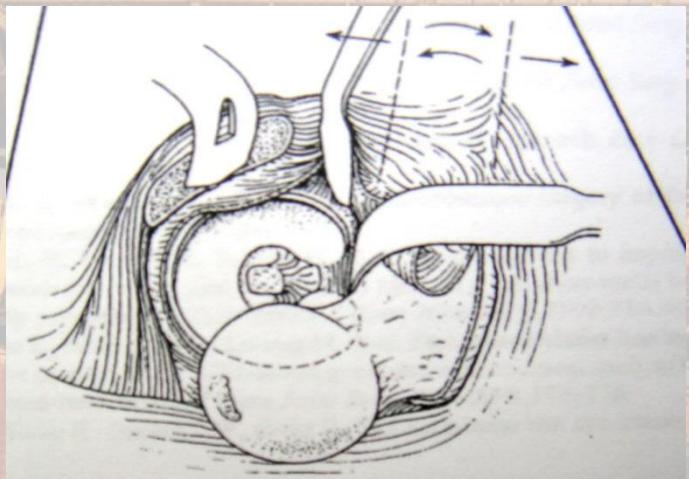
- Massages
- Mobilisation lombo vertébrale antéro-postérieure

# Traitement par luxation chirurgicale

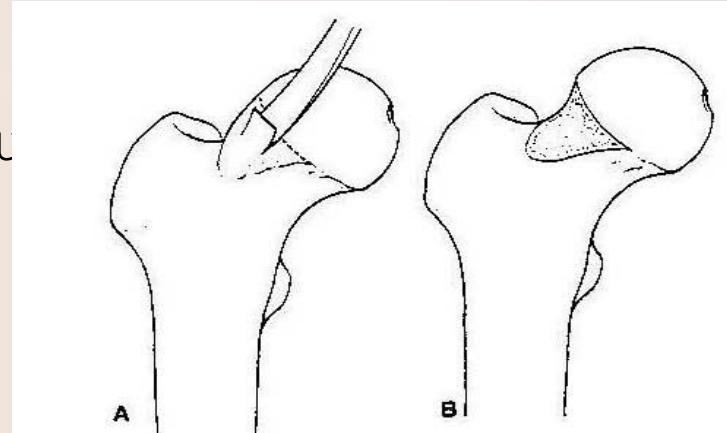
Voie d'Abord:

trochantérotomie ou voie antérieure

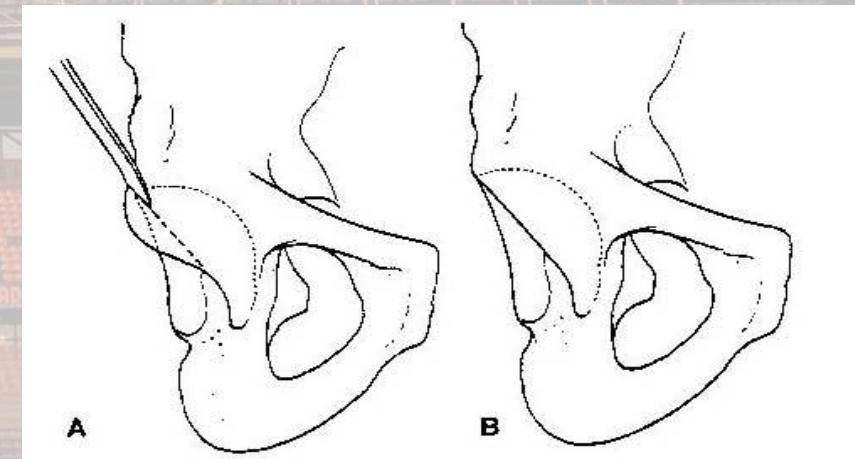
Lavigne, Ganz et al 04



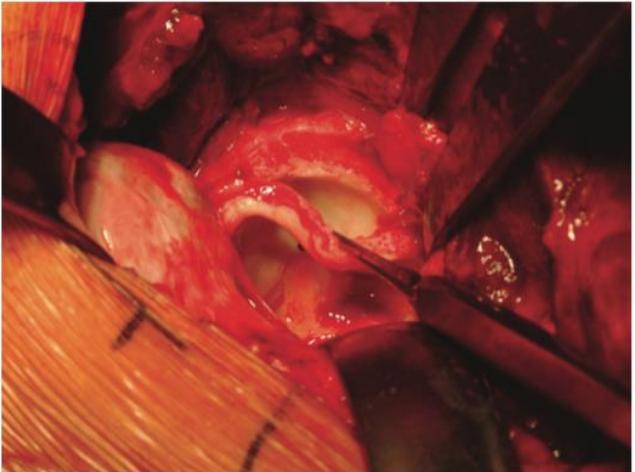
Luxation chirurgicale



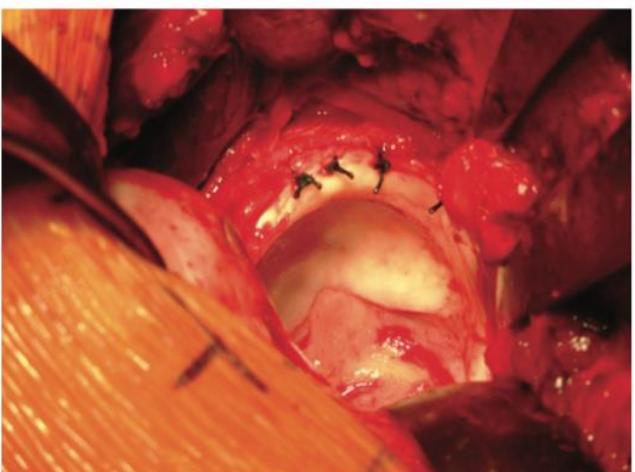
Ostéoplastie du col



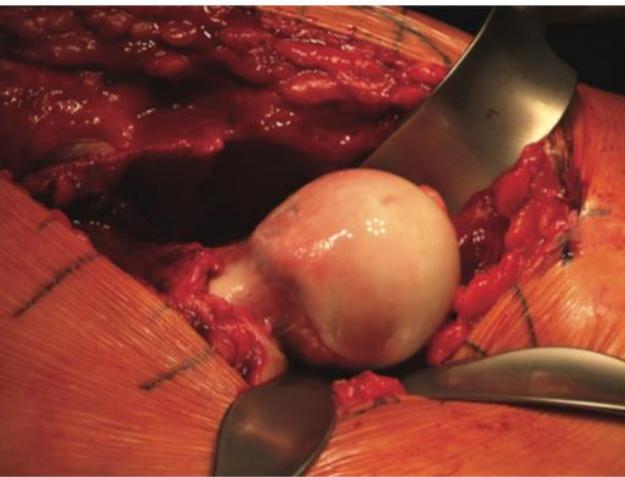
Acétabuloplastie



**Figure 1.** Surgical hip dislocation allows an excellent visualization of the joint. For the treatment of labral lesions and/or acetabular overcoverage (pincer-type femoroacetabular impingement), the labrum was detached from the rim and the rim trimmed using an osteotome.



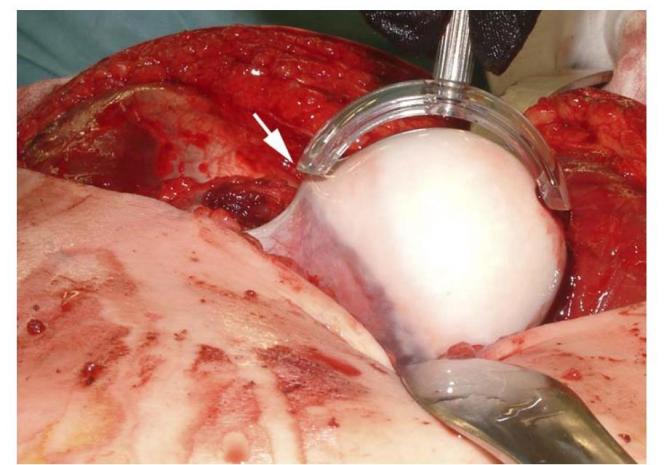
**Figure 2.** After rim trimming, the labrum was refixed using bone anchors. Knots have to be placed on the outside of the joint to avoid any cartilage damage.



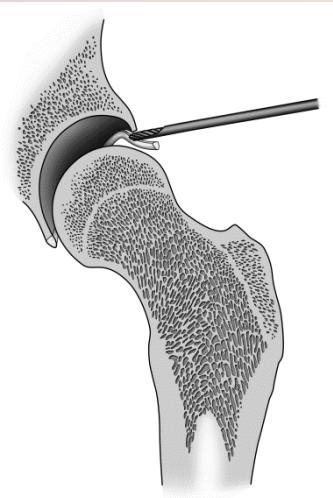
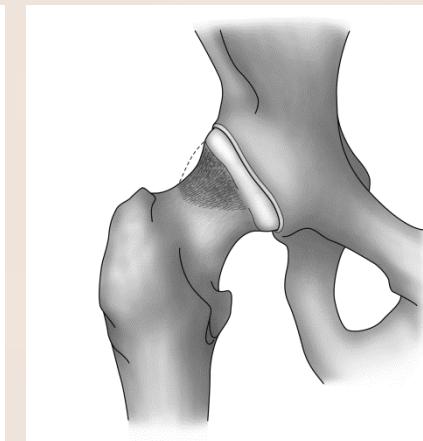
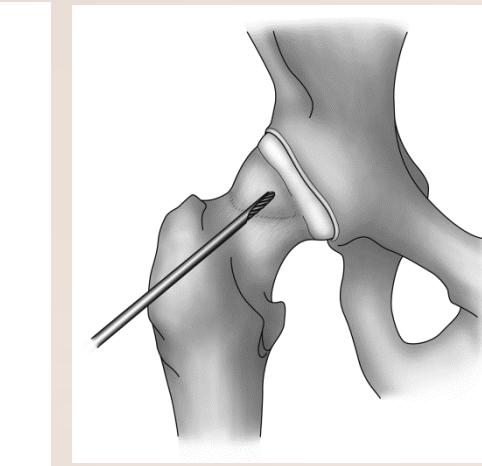
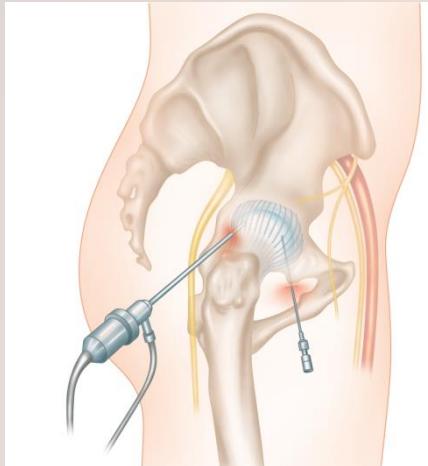
**Figure 3.** Almost all hips in the present series had a reduced head-neck offset with a typical bump at the head-neck junction.



**Figure 4.** Osteochondroplasty restoring a normal head-neck offset was performed in all but one hip. We routinely perform the correction along the entire anterolateral neck length (from the head-neck junction to the intertrochanteric line) to also improve hip flexion and to reduce the risk of extra-articular subspinous impingement.

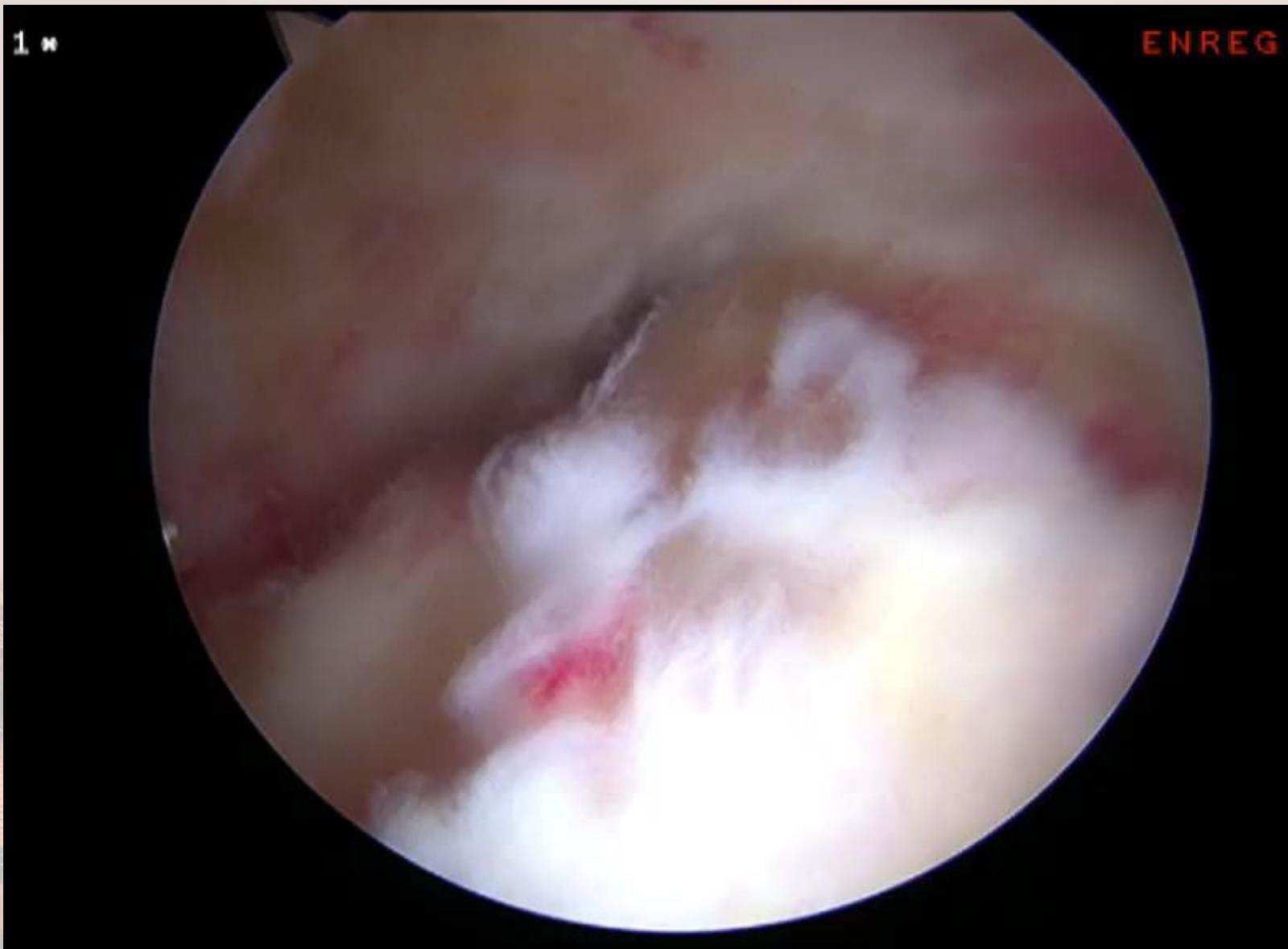


# Traitement Arthroscopique

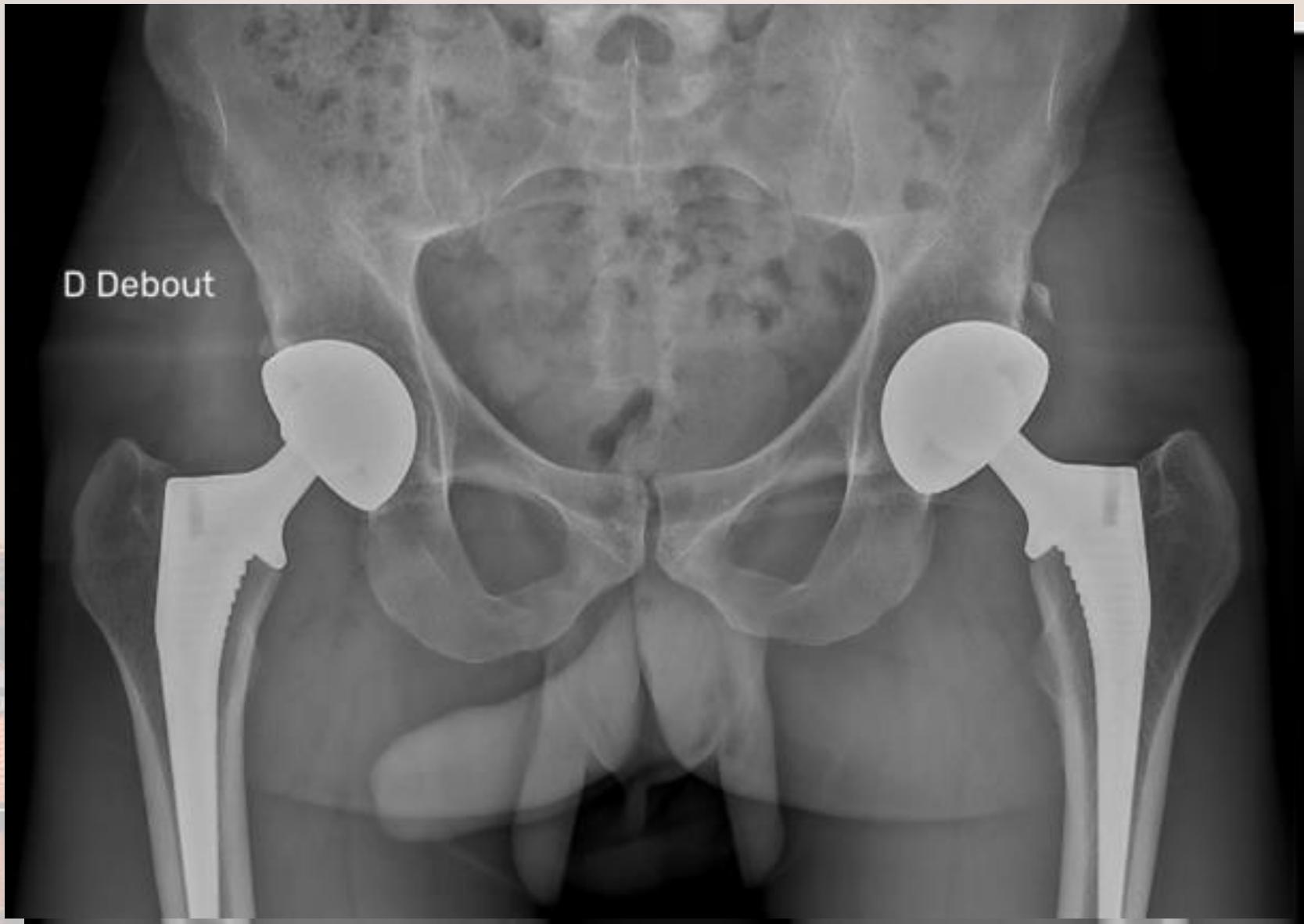


1 \*

ENREG.



D Debout





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