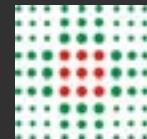


# La patologia dolorosa di Ginocchio, Anca e Spalla: aspetti diagnostici e terapeutici, ortesi, chirurgia sostitutiva e correttiva

E. Sabetta

**IL DOLORE CRONICO NON ONCOLOGICO:  
APPROPRIATEZZA DIAGNOSTICA E TERAPEUTICA IN  
MEDICINA GENERALE**  
**Corso PAF Accreditato ECM rivolto ai MMG  
Distretto REGGIO EMILIA**  
**Giovedì 17 novembre 2011 (1.a Edizione)**  
**Venerdì 18 novembre 2011 (2.a Edizione)**  
**dalle ore 14,30 alle ore 19,30**  
**Sala Polivalente**  
**Bagnolo in Piano**

*Struttura Complessa  
Ortopedia e Traumatologia  
Direttore: Ettore Sabetta  
Arcispedale S. Maria Nuova  
Reggio Emilia*



**SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA**  
Azienda Ospedaliera di Reggio Emilia

ANCA

# ARTROPROTESI

- “Tradizionali”
- A conservazione del collo femorale (ministeli)
- Di rivestimento

*- Evidenze scientifiche  
- Pubblicità  
- Mercato  
- Moda*



# MATERIALI

- Titanio
- Ceramica



# MINISTELI

- Meno invasivi (femore)
- Meccanicamente meno validi
- Teoricamente più facili da revisionare (femore)
- Giovani (qualità osso)
- Più elevata % fallimenti precoci
- Carico completo differito
- No risultati a lungo termine



Ragazzo 34 aa



Donna 80 aa



ORTHOsuperSite.com

Volume 14 • Number 5  
SEPTEMBER/OCTOBER 2011

# Orthopaedics today EUROPE

THE OFFICIAL NEWSPAPER OF EFORT

A SLACK Incorporated® publication



## ►EFORT News

- Interview with Prof. Valderrabano
- Portraits of National Societies Montenegro and Turkey
- Trauma and orthopaedics in conflict post-conflict settings

See Pages B-9 ►

## COVER STORY

## Uncertainty, lack of data complicate use of short stem hip implants

Hip implants featuring a shortened femoral stem are designed to preserve bone stock during total hip arthroplasty while offering a more physiologic replication of normal human anatomy compared with longer stem prostheses. Nearly a decade after their release, however, there is a growing sense among orthopaedic surgeons that, despite a strong theoretical basis for their use, clinical data may be as of yet lacking on whether short stem hip implants fulfill their potential. Questions remain about what types of patients benefit from their use, the optimal surgical technique for their insertion and whether they replace or supplement the current total hip arthroplasty implant offerings.

Short stem total hip arthroplasty (THA) has generated significant interest in surgical centers across Europe. And, although consensus on short stem hip arthroplasty remains elusive, some experts believe this option, which tends to foster less invasive surgery, has significant clinical benefit.

"The introduction of the short stem implant has extended the range and indications of minimally invasive hip arthroplasty," Dieter C. Wirtz, MD, of University Hospital, Bonn, Germany, told ORTHOPAEDICS TODAY EUROPE. "When used within their indications and implanted correctly, the short stem implants are comparable in their risks of instability, fracture or failure to a conventional uncemented hip prosthesis."

In general, short stem implants are designed to require less resection of the upper femur and/or less reaming of the



Dieter C. Wirtz, MD, of University Hospital, Bonn, Germany, cited the benefits

## OTE EXCLUSIVES

### JOINT RECONSTRUCTION

#### Similar conventional, navigated TKR results

No significant differences were found in 12-month clinical outcomes between conventional and navigated knee replacements in a randomized controlled trial conducted in Scotland. **4**

### IN THE JOURNALS

#### Hip arthroscopy for FAI may be cost-effective

Based on a model of 36-year-old patients, researchers



# ARTROPROTESI DI RIVESTIMENTO

- Meno invasive per l'osso (femore)
- Più invasive per la via d'accesso
- Più facili da revisionare (femore)
- Giovani (qualità osso)
- Più elevata % fallimenti precoci
- Sopravvivenza a lungo termine inferiore
- METALLO-METALLO





# Orthopaedics today

## EUROPE

THE OFFICIAL NEWSPAPER OF EFORT

### Higher than expected adverse event rates with metal-on-metal THA

The rate of adverse events, such as pseudotumor formation, high metal ion levels and metallosis, relative to metal-on-metal total hip arthroplasties exceeds that reported previously in the literature.

"Our study shows a substantially higher incidence of pseudotumor formation and subsequent revisions in patients with metal-on-metal total hip arthroplasties than previously reported," Bart H. Bosker, MD, a researcher in the department of orthopaedic surgery and traumatology at the Isala Clinics, The Netherlands, said at the 12th EFORT Congress 2011.

For their study, Bosker and colleagues evaluated a prospective cohort of asymptomatic patients to determine the incidence of symptomatic pseudotumors after large-diameter femoral head metal/metal total hip arthroplasty (THA) and

to identify potential risk factors for this condition.

Bosker noted these results came after an April 2010 alert issued by the British Orthopaedic Association regarding adverse events after metal/metal THA.

From January 2005 through November 2007, Bosker and colleagues studied 108 patients who had metal/metal THAs with large diameter femoral heads performed at a single center. They collected data on pain and mechanical symptoms, hip outcome scores, SF-36 scores and measured metal-ion levels. Investigators also performed physical examinations and obtained conventional hip and pelvis radiographs and CT scans. Patients whose CT scans showed possible peri-articular masses were evaluated via MRI, ultrasound biopsies and histological tests.

Overall, the study group was followed up for 3.6 years, average.

The investigators diagnosed 42 patients with pseudotumors and 13 pa-

tients with symptomatic pseudotumor underwent revision THAs that included polyethylene acetabular components and small diameter metal heads. The total revision rate was 12%.

"We did not anticipate the high incidence of pseudotumor formation. Most revision cases were identified only after applying an intensive screening protocol," Bosker told *ORTHOPAEDICS TODAY EUROPE*. "We recommend close monitoring of patients with a metal-on-metal hip arthroplasty." - by Tara Grassia OTI

#### PERSPECTIVE

The results of this study add to the growing concerns of unacceptable rates of serious complications following large diameter total hip arthroplasty. There are a number of interesting points in the article which are consistent with our experience and those of others.

— David J. Langton, MRCS

Joint Replacement Unit  
University Hospital of North Tees  
Stockton, England

**Disclosure:** Langton receives consulting/instructional course fees from DePuy, Finsbury and Wright Medical and travel reimbursement from DePuy, Wright Medical, Smith & Nephew and Zimmer.



SCAN THE CODE TO  
read more of  
Dr. Langton's  
perspective on  
this article, or visit  
ORTHOsuperSite.  
com; search: 87102.

If you don't have a code reader, download the  
free app at the iTunes App store. Enter ScanLife.

#### Reference:

Bosker BH, Ettema HB, Boomsma MF, et al. Incidence of pseudotumors in patients after metal-on-metal large-diameter femoral head total hip arthroplasty: A prospective cohort study. Presented at the 12th EFORT Congress 2011. June 1-4. Copenhagen, Denmark.

Bart H. Bosker, MD, can be reached at P.O. Box 10500, 800GM, Zwolle, The Netherlands; +31-6-24866058; email: b.h.bosker@isala.nl.

**Disclosure:** Bosker has no relevant financial disclosures.





Collega Medico 61 aa, protesi impiantata due anni prima. Dolore

## IDENTIFICAZIONE PAZIENTE

cognome e nome	Indirizzo			data prelievo	
				30/04/2010	
protocollo accettazione <b>M 695</b>	data di nascita	età 61a.	sesso <b>M</b>	carta d'identità	codice fiscale

### CROMO sangue

metodo : assorbimento atomico-sens. 0.1 ug/dL

1.1 ug/dL (<1.0)

### COBALTO sangue

metodo : assorbimento atomico-sens. 0.1 ug/L

12.2 ug/L (<1.0)

Note : Valore ricontrollato.

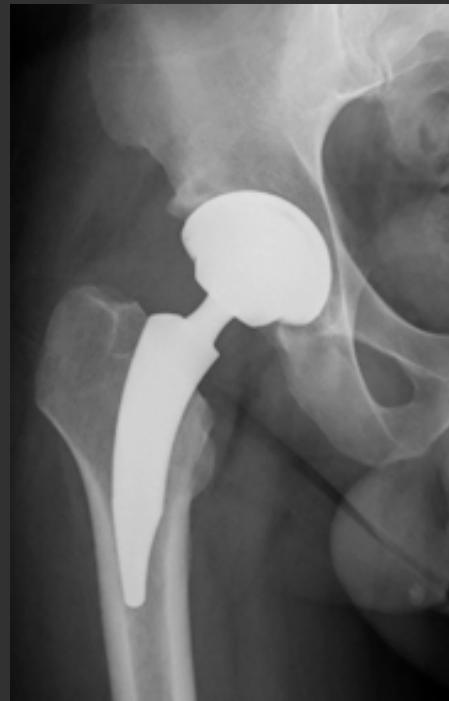
Il Direttore





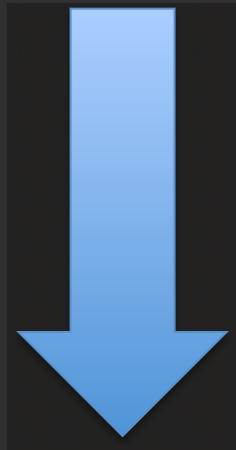
Il Cobalto sierico si è normalizzato dopo 7 mesi dall'intervento

# ARTROPROTESI ANCA



FALLIMENTI → *COTILE : STELO = 3 : 1*

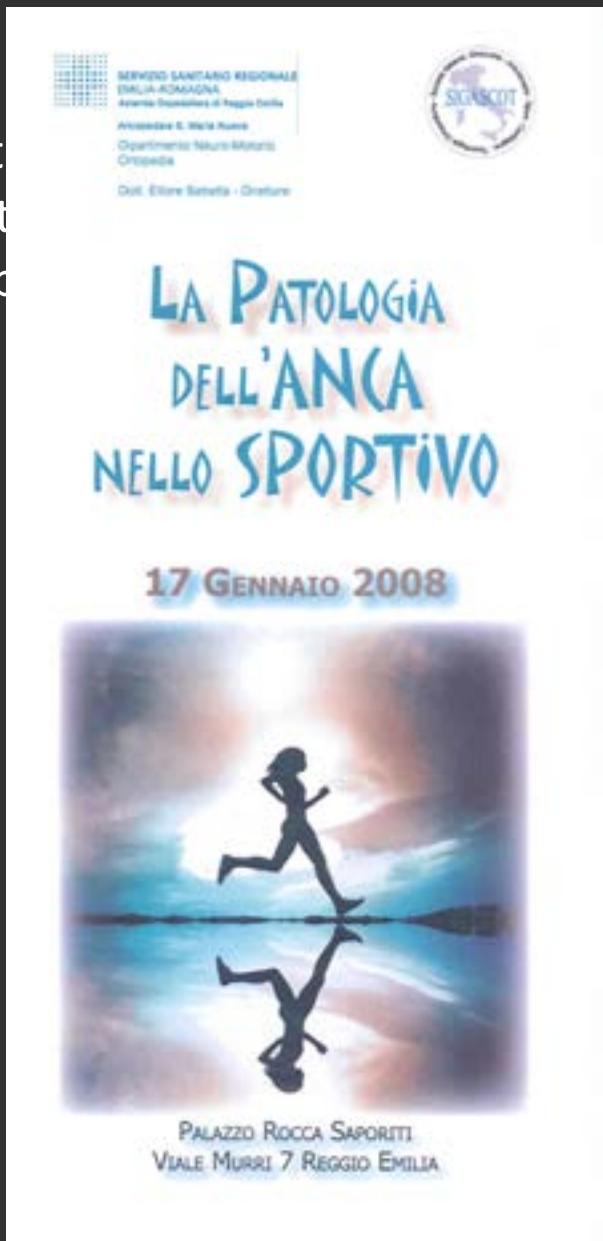
# COME EVITARE O RITARDARE LA PROTESI?



INDIVIDUARE E CURARE LE  
PATOLOGIE PRE-ARTROSICHE

# CONFLITTO FEMORO-ACETABOLARE (F.A.I.)

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the hip



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to my friend  
Ettore  
a con simpatia e River volat of God



# Gruppo Italiano di Chirurgia Conservativa dell'Anca

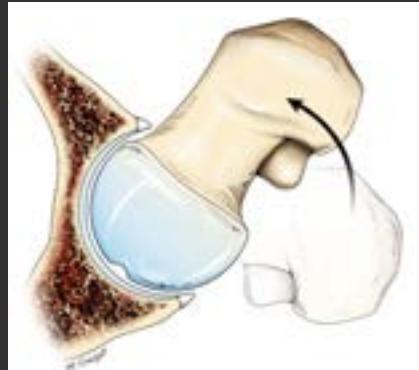
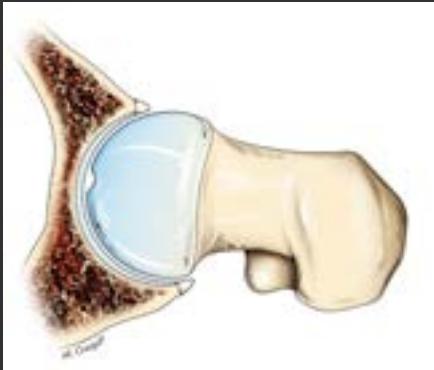
## Soci Fondatori

- [Reinhold Ganz](#), Berna [CH]
- [Francesco Maria Benazzo](#), Pavia
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- [Antonio Capone](#), Cagliari
- [Guido Grappiolo](#), Pietra Ligure (SV)
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- [Mauro Monesi](#), Cesena
- [Ettore Sabetta](#), Reggio Emilia
- [Luigino Turchetto](#), Portogruaro (VE)

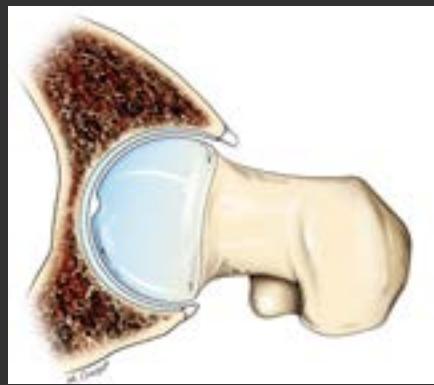
Seleziona un nome, oppure visualizza la [mappa geografica](#) dei soci.

## Link Esterni

[Prof. R. Ganz](#)

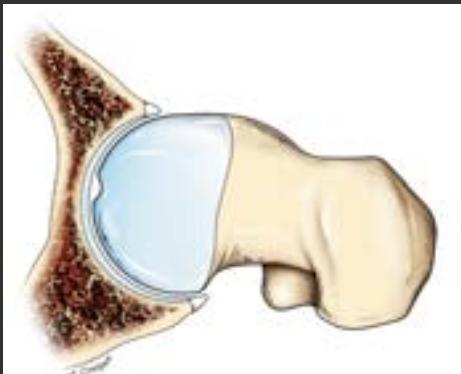


ROM normale dell'anca



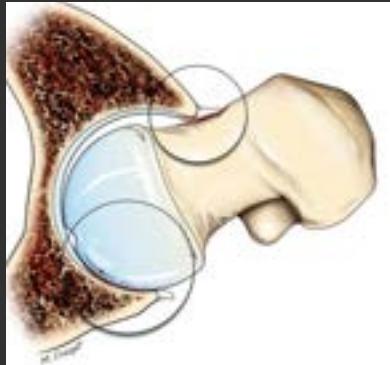
**Pincer impingement:** eccesso di copertura acetabolare con contatto precoce testa-collo femorale e acetabolo

Degenerazione articolare posteroinferiore (contrecoup) dovuta ad una sublussazione subclinica



**Cam impingement:** la giunzione testa-collo è asferica e danneggia il cercine e la cartilagine sottostante

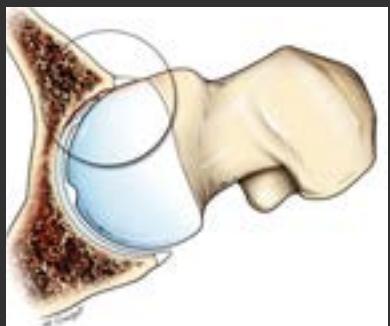
## Pincer-type FAI



onne tra i 30 e i 40 anni,  
sportive (yoga, aerobica)



## Cam-type FAI



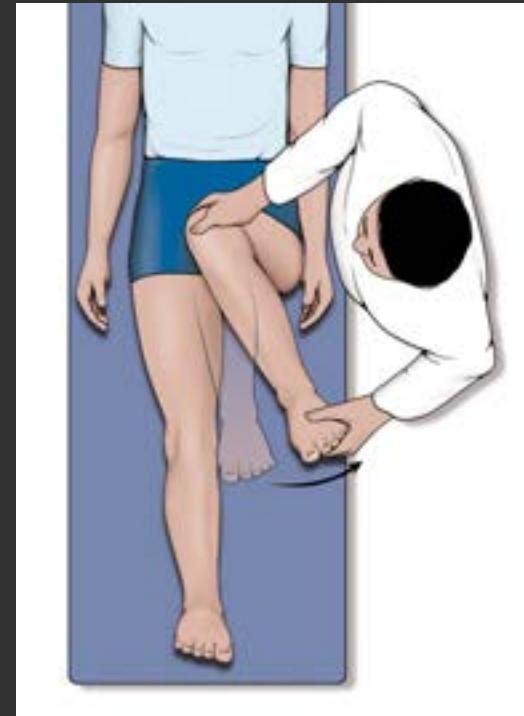
uomini, atleti, tra i 20 e  
i 30 anni

Beck M, Kalhor M, Leunig M, Ganz R Hip morphology influences the pattern of damage to the acetabular cartilage: femoroacetabular impingement as a cause of early osteoarthritis of the hip

*J Bone Joint Surg Br.* 2005

# CLINICA

- Dolore inguinale
  - posizione seduta prolungata
  - sedere a gambe incrociate
  - sedere posizione a “4”
  - entrare/uscire dall’automobile
  - indossare calze/scarpe
- Dolore flessione, adduzione, rotazione interna dell’anca
- Ridotta o assente intra-rotazione

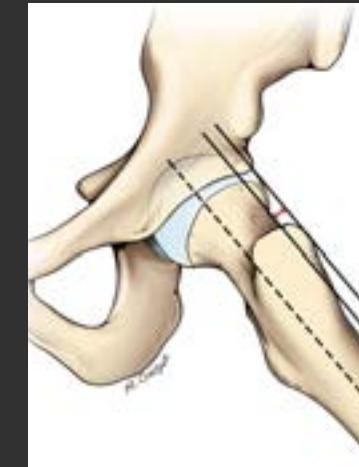
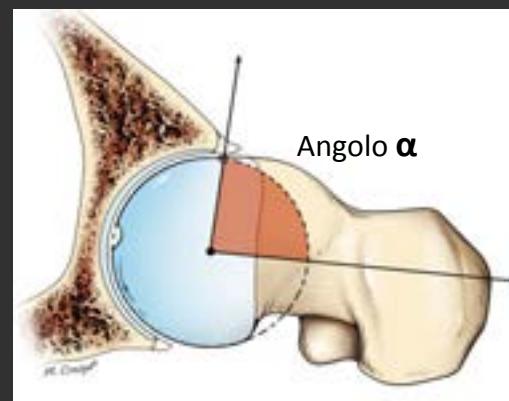
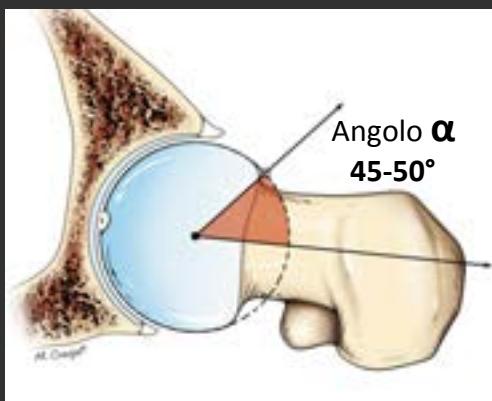


Il test del conflitto anteriore è positivo nel 99% dei pazienti

J Marc Clinical presentation of femoroacetabular impingement  
*Knee Surg Sports Traumatol Arthrosc* 2007

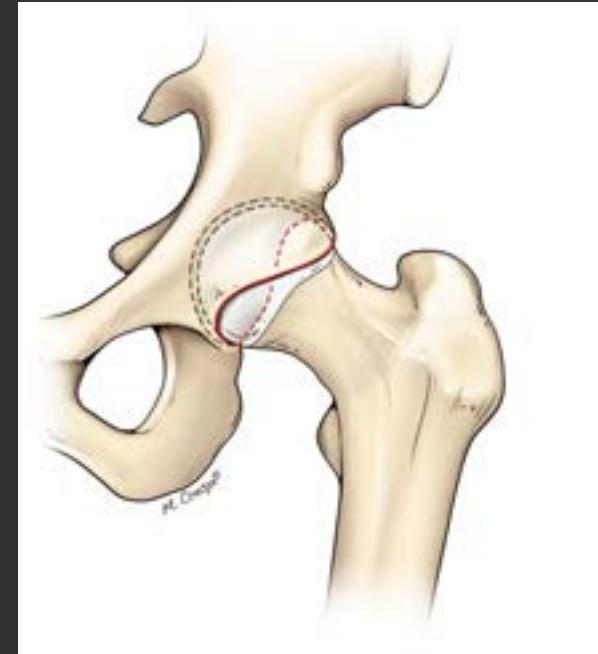
# CAM: passaggio testa-collo

- BUMP, PISTOL-GRIP deformity



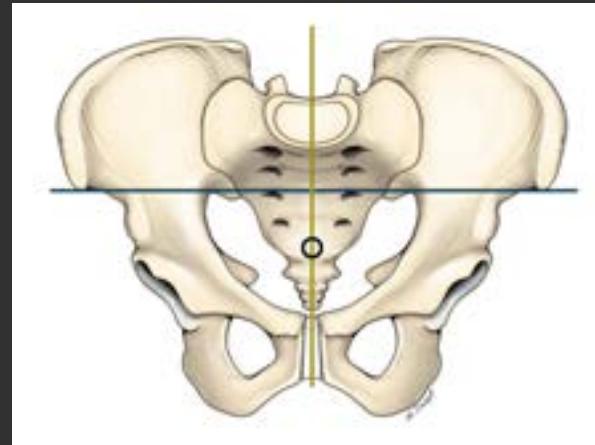
## PINCER: acetabolo

- CROSS – OVER sign



- "Cross-over sign": sensitivity 92%, specificity 55%, positive predictive value 59%, negative predictive value 91% [Dandachli W et al. 2009](#)
- "Posterior wall sign": sensitivity 81%, specificity 53%, positive predictive value 54%, negative predictive value 80% [Dandachli W et al. 2009](#)

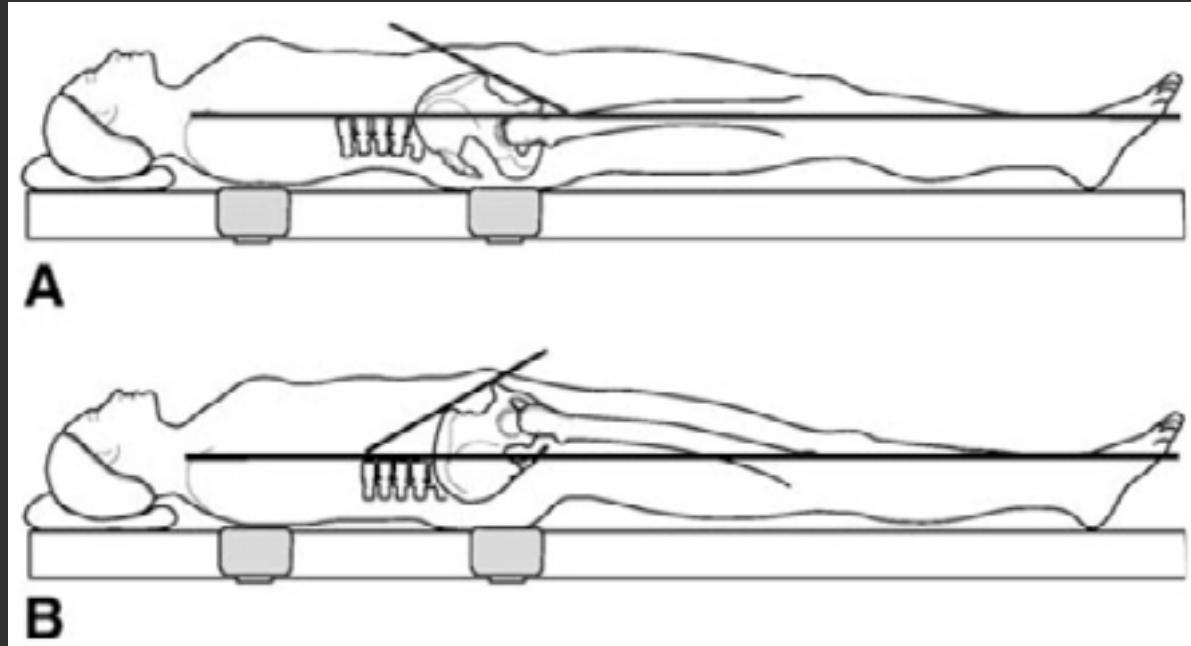
# RX BACINO



Well-centered AP view of the pelvis: distance between the sacrococcygeal joint and pubic symphysis measuring about 3 to 5 cm (3.2 cm male, 4.7 cm female) (Siebenrock KA et al., CORR 2003), or when the coccyx is about 1 cm from the pubic symphysis (Giori NJ, Trousdale RT, CORR 2003)

Reclination of the pelvis can underestimate the appearance of retroversion (crossover sign), and inclination can overestimate the findings (Armfield DR et al., Clin Sports Med 2006)

# PELVIC TILT



- Wan Z et al. 2009
- Zhu J et al. 2010

# PINCER: CARATTERISTICHE RADIOLOGICHE

- SYNOVIAL HERNIATION PIT

Pitt et al. 1982, Daenen et al. 1997,  
Thomason et al. 1983



# PINCER: CARATTERISTICHE RADIOLOGICHE

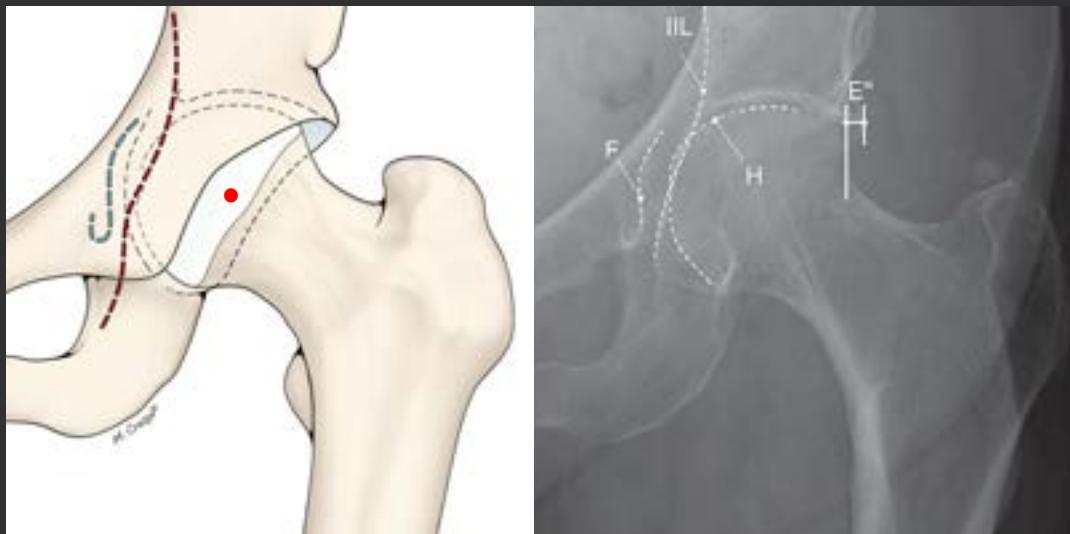
## COXA PROFUNDA

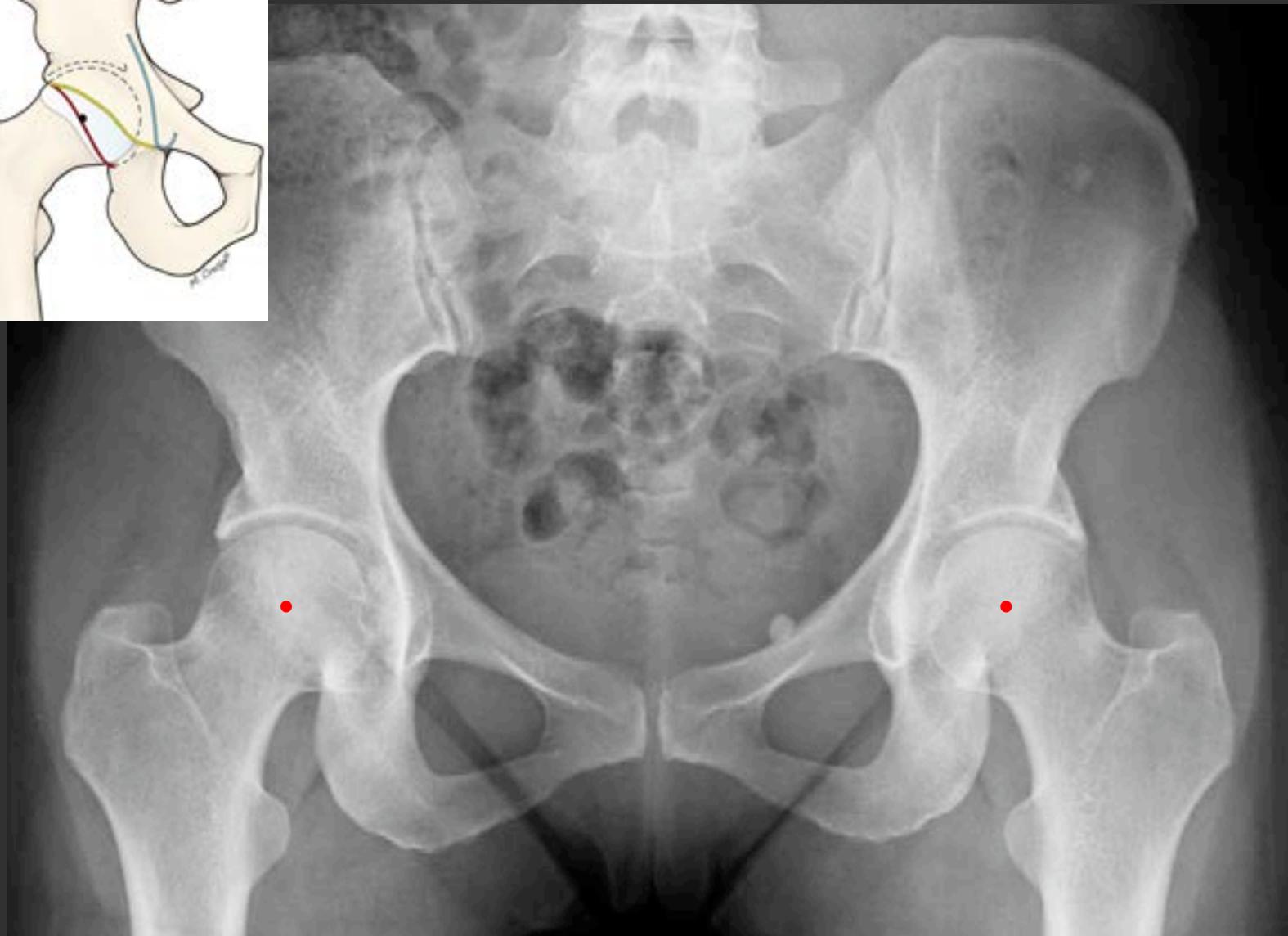
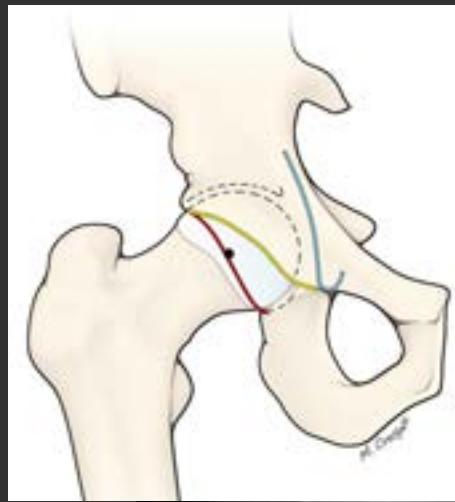
(il fondo dell'acetabolo si sovrappone o è mediale alla linea ileo-ischiatica)



## PROTRUSIO ACETABULI

(la testa del femore si sovrappone o è mediale alla linea ileo-ischiatica)

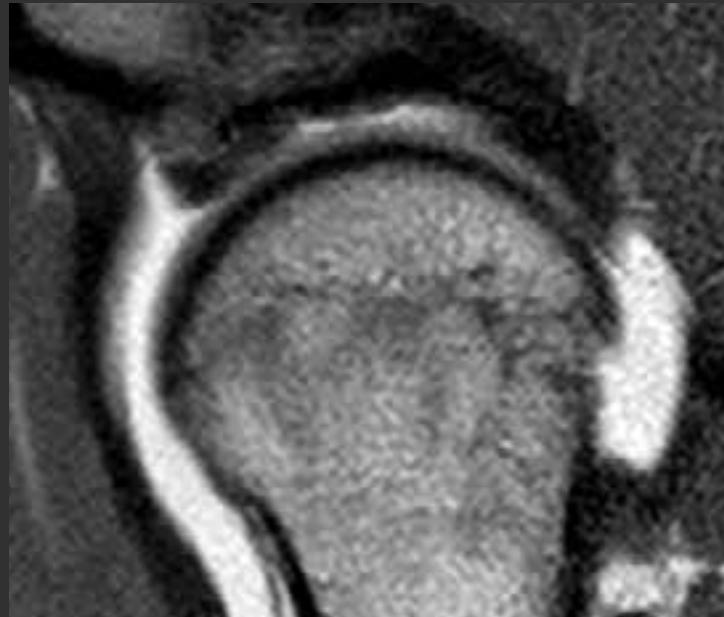
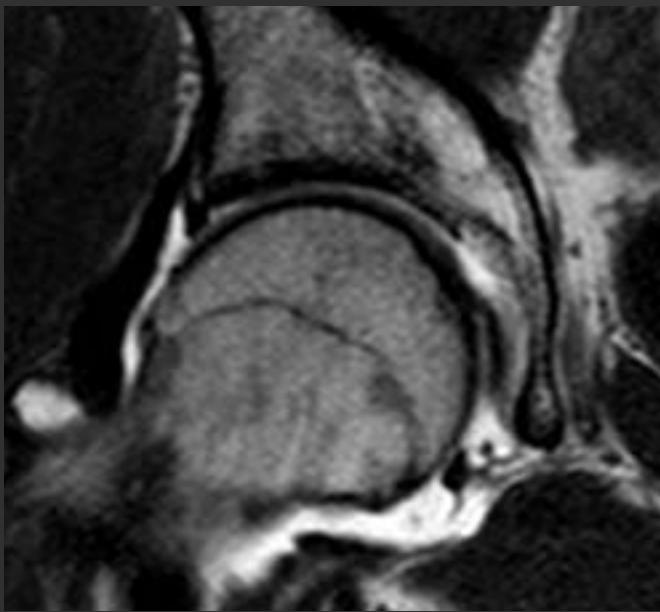




# ARTRO-RMN

---

- Utile per valutazione globale delle strutture articolari e extra-articolari
- Il solo esame diagnostico per lesioni condrali e del labbro

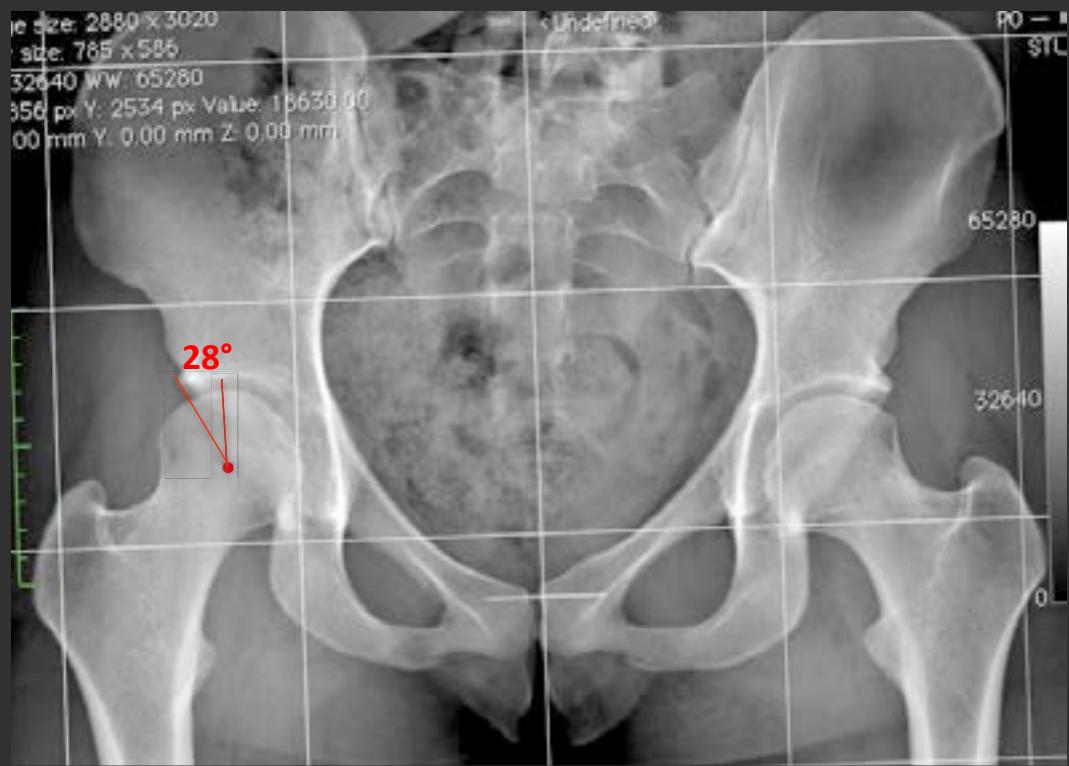




A.R., ragazza 20 aa, danza da 17 anni. 1 mese fa fitta dolorosa anca dx dopo uno slancio durante un allenamento. Dolore attenuato anche nelle attività quotidiane.

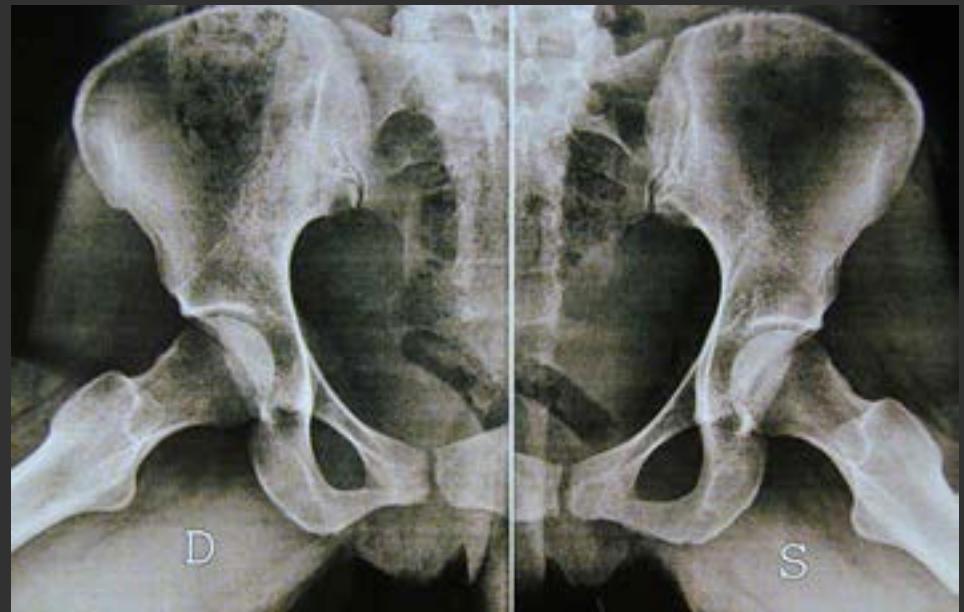




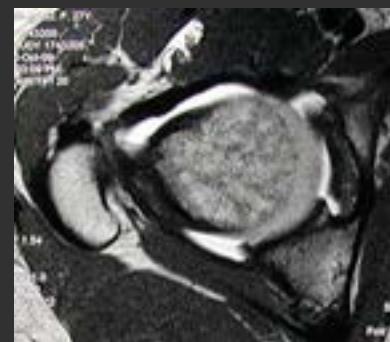






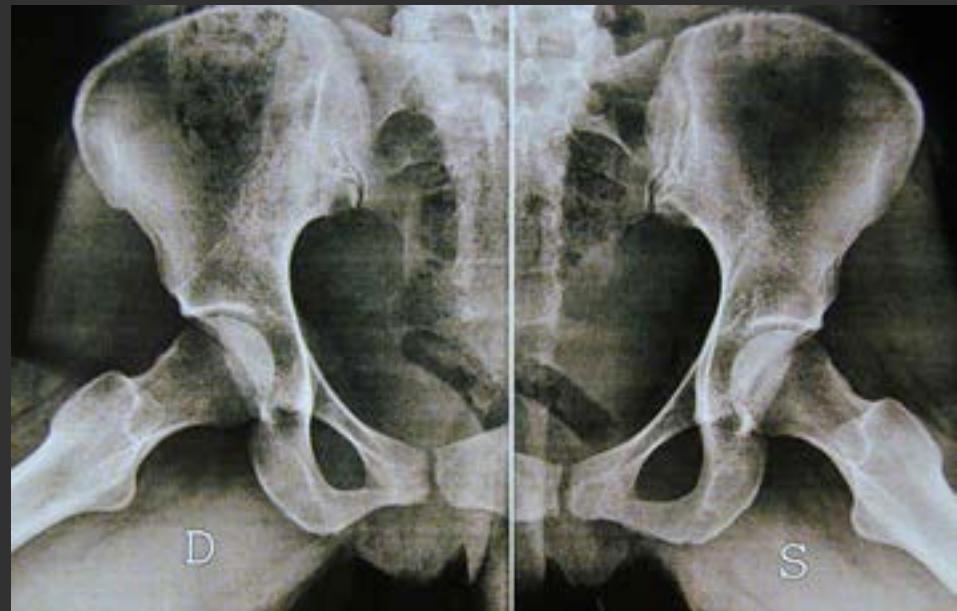


D.C., donna, 27 aa. Danza.  
Coxalgia dx da due anni.  
Da due mesi dolore anche a sin.





D

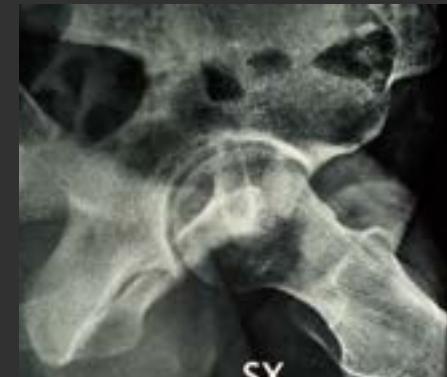


D

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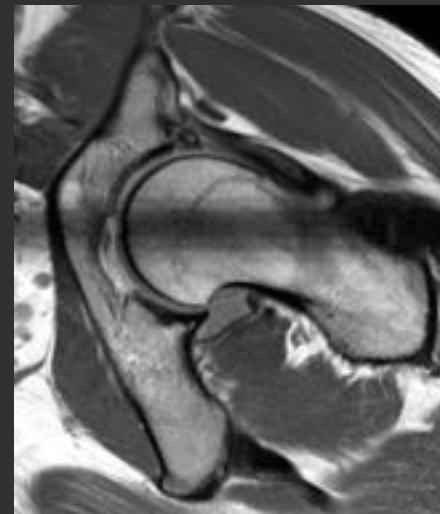
D.C., donna, 27 aa. Danza. Coxalgia dx  
da due anni.  
Da due mesi dolore anche a sin.





P.A., ragazzo 20 anni. Arti marziali, ridotta articolarità bilaterale, coxalgia bilaterale, specie a sinistra da circa 2 anni.





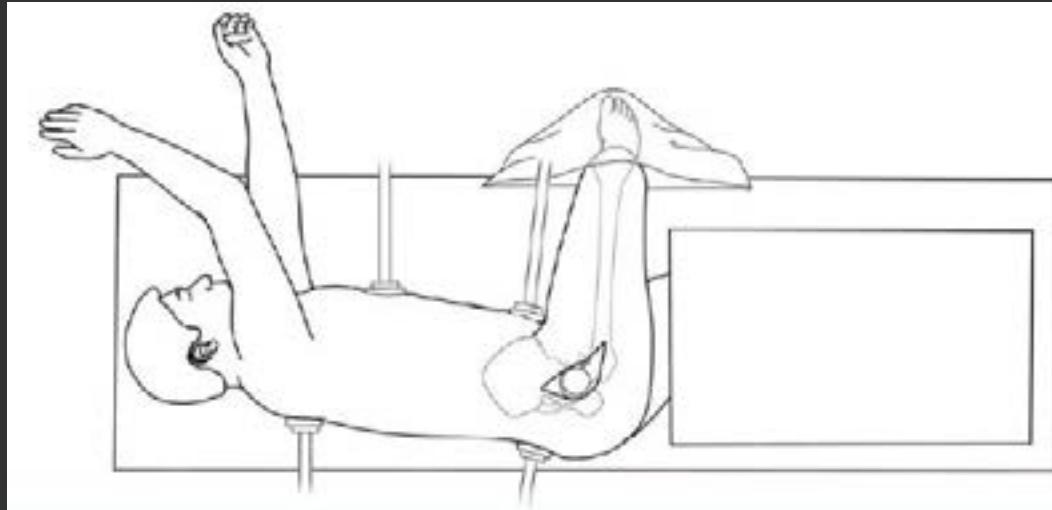
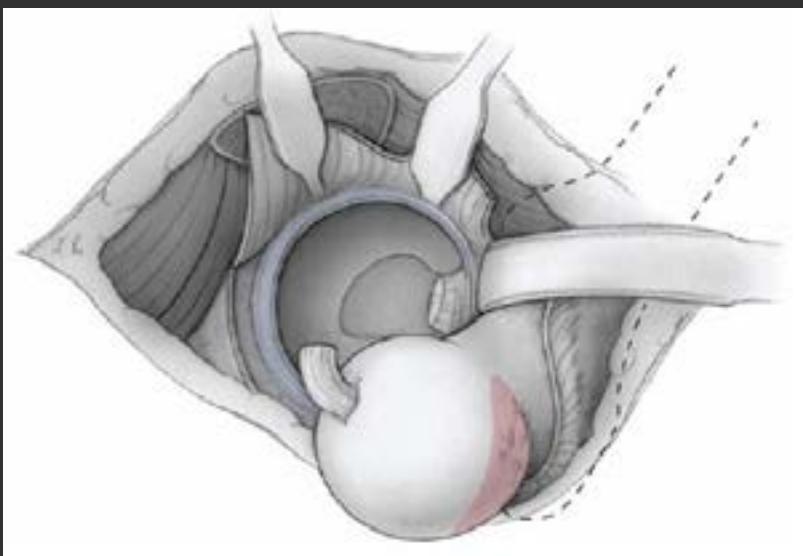
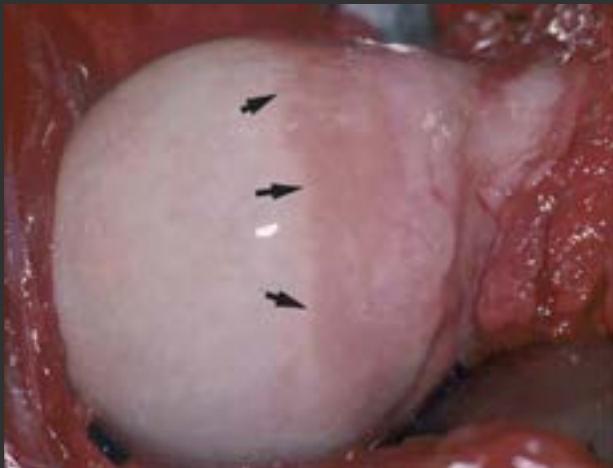
L.G., uomo 31 aa, insegnante di judo



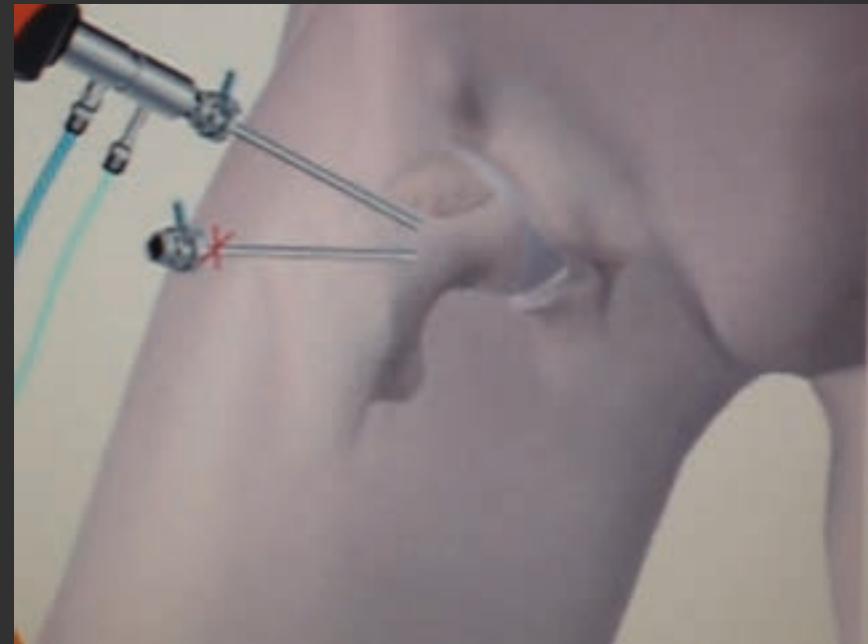
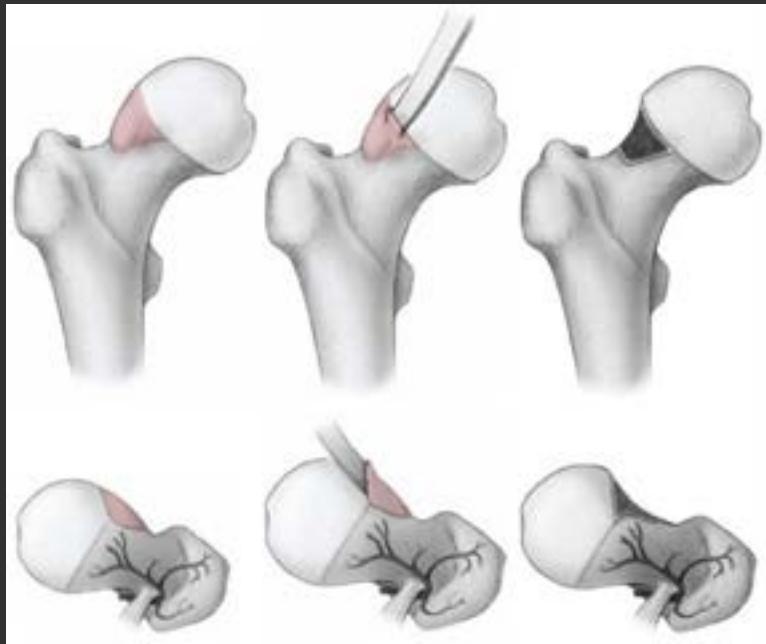
C.L., uomo 37 aa. Calcetto e moto in pista.  
Ha sempre avuto articolarità ridotta.  
Coxalgia bilaterale da 2 anni, più a destra,  
che si accentua dopo sforzo e in moto  
perchè ha difficoltà a tenere le gambe aperte.



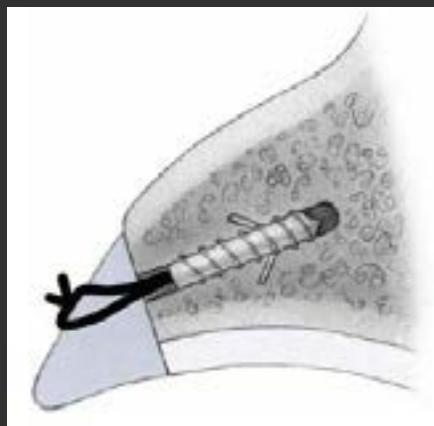
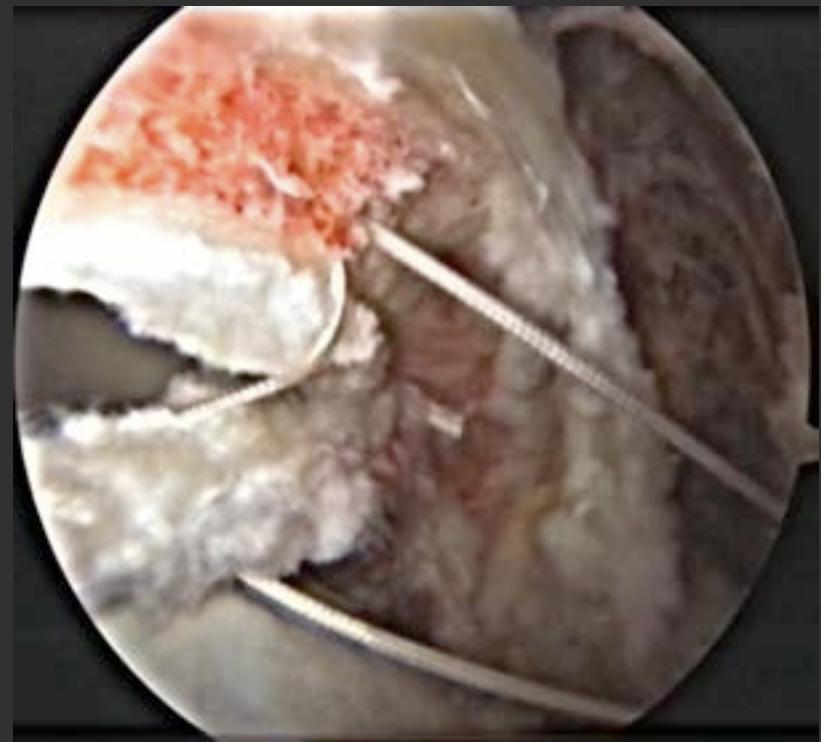
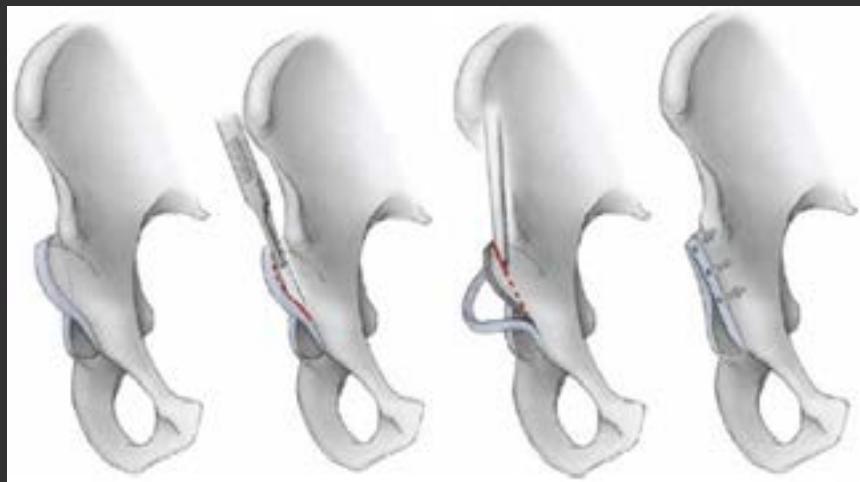
## CAM: trattamento



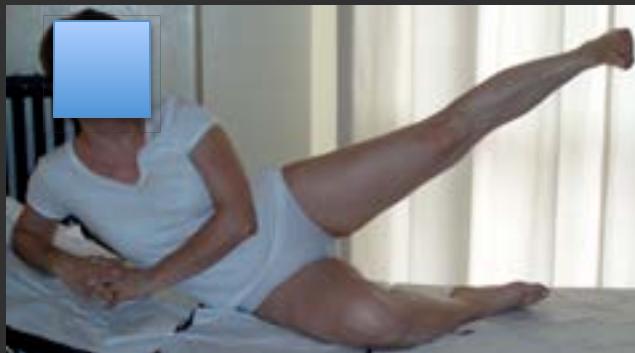
## CAM: trattamento



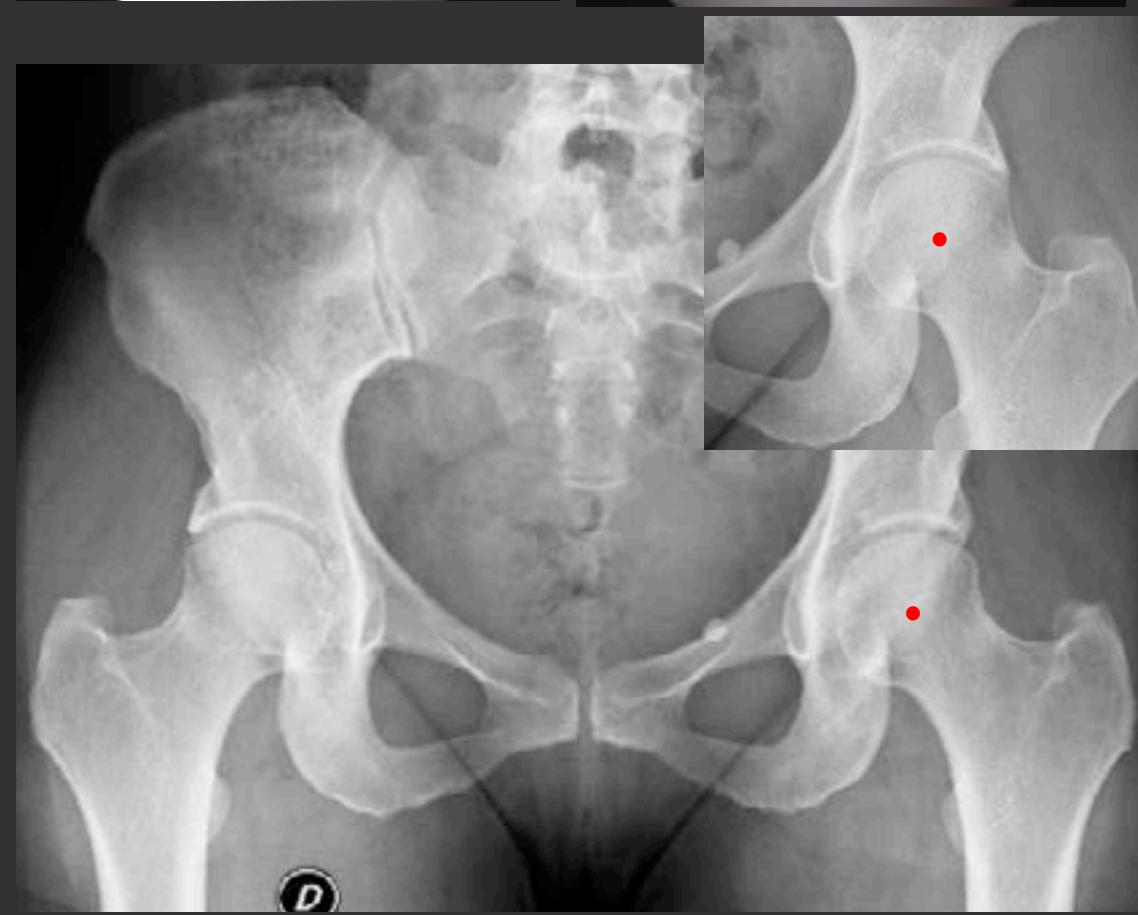
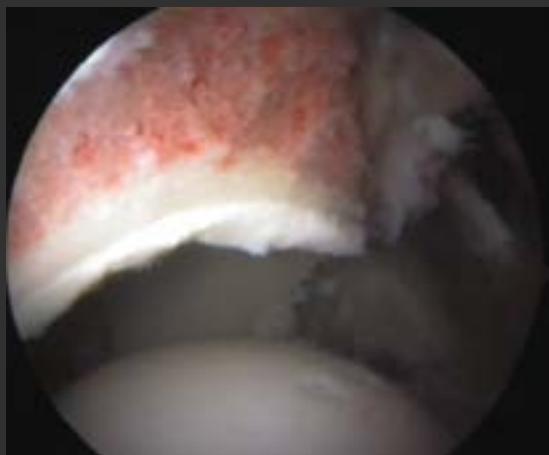
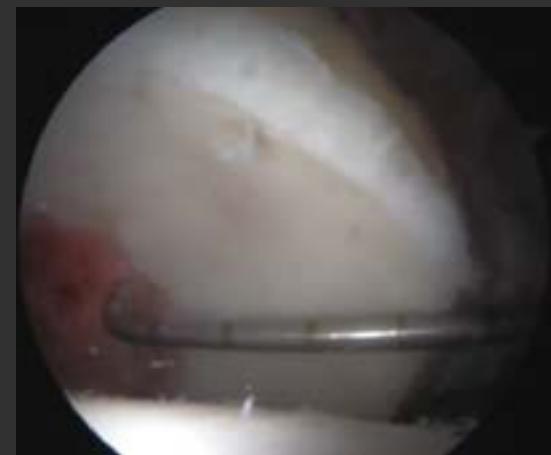
## PINCER: trattamento



F.L., donna, 40 anni, arti marziali da 10 aa., coxalgia da 10 aa spec a sinistra, abduzione limitata e dolorosa





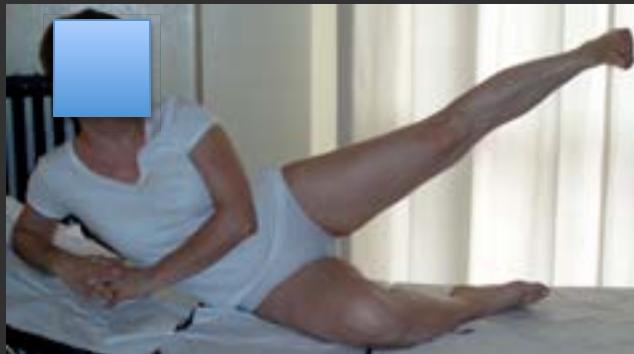


**5 mesi post-op.** Molto soddisfatta. Migliorata l'articolarità. Ha ripreso lo sport: arti marziali (anche i calci). Non ha dolore. Vuole fare l'altra anca che nel frattempo è peggiorata.



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**PRE-OP**



**GRAZIE**