

IL TRATTAMENTO DELLA COXARTROSI E DELLA GONARTROSI NELLO SPORTIVO OVER-FIFTY



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Demografia del "paziente protesico"

Paziente tradizionale

Anziano

Sedentario

Magro

Bassa richiesta

Principale obiettivo: dolore



Demografia del "paziente protesico"

Il "nuovo" paziente

Peso > del 20%

Maggior educazione

Più attivo fisicamente

Più longevo del 25%

Aspettative maggiori



Aspettative del paziente

THE JOHN INSALL AWARD

Patient Expectations Affect Satisfaction with Total Knee Arthroplasty

Philip C. Noble, PhD^{,†}; Michael A. Conditt, PhD[†]; Karon F. Cook, PhD[‡]; and
Kenneth B. Mathis, MD[§]*

“Satisfaction is primarily determined by
patients’ expectations, and not by level of function”

Noble, CORR 2006

Aspettative del paziente

Previous unsuccessful experience

→ greater vulnerability or concerns



Noble, CORR 2006

TRATTAMENTO DELL'ARTROSI

DI GINOCCHIO NEL

PAZIENTE GIOVANE ATTIVO

CONSERVATIVO



AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS

**TREATMENT OF OSTEOARTHRITIS OF THE
KNEE (NON-ARTHROPLASTY)**

FULL GUIDELINE

Adopted by the American Academy of Orthopaedic Surgeons

Board of Directors

December 6, 2008

EULAR Recommendations 2003

Table 6 Final set of 10 recommendations based on both evidence and expert opinion

- | | |
|----|--|
| 1 | The optimal management of knee OA requires a combination of non-pharmacological and pharmacological treatment modalities |
| 2 | The treatment of knee OA should be tailored according to:
(a) Knee risk factors (obesity, adverse mechanical factors, physical activity)
(b) General risk factors (age, comorbidity, polypharmacy)
(c) Level of pain intensity and disability
(d) Sign of inflammation—for example, effusion
(e) Location and degree of structural damage |
| 3 | <u>Non-pharmacological treatment of knee OA should include regular education, exercise, appliances (sticks, insoles, knee bracing), and weight reduction</u> |
| 4 | Paracetamol is the oral analgesic to try first and, if successful, the preferred long term oral analgesic |
| 5 | Topical applications (NSAID, capsaicin) have clinical efficacy and are safe |
| 6 | NSAIDs should be considered in patients unresponsive to paracetamol. In patients with an increased gastrointestinal risk, non-selective NSAIDs and effective gastroprotective agents, or selective COX 2 inhibitors should be used |
| 7 | Opioid analgesics, with or without paracetamol, are useful alternatives in patients in whom NSAIDs, including COX 2 selective inhibitors, are contraindicated, ineffective, and/or poorly tolerated |
| 8 | SYSADOA (glucosamine sulphate, chondroitin sulphate, ASU, diacerein, hyaluronic acid) have symptomatic effects and may modify structure |
| 9 | Intra-articular injection of long acting corticosteroid is indicated for flare of knee pain, especially if accompanied by effusion |
| 10 | Joint replacement has to be considered in patients with radiographic evidence of knee OA who have refractory pain and disability |

Gradi raccomandazione EBM

Guideline Language	Grade of Recommendation	Level of Evidence
<i>We recommend</i>	A	Level I
<i>We suggest</i>	B	Level II or III
<i>option</i>	C	Level IV or V
<i>We are unable to recommend for or against</i>	I	None or Conflicting

Patient Education and Lifestyle Modification

Recommendation 1

We suggest patients with symptomatic OA of the knee be encouraged to participate in self-management educational programs such as those conducted by the Arthritis Foundation, and incorporate activity modifications (e.g. walking instead of running; alternative activities) into their lifestyle.

Level of Evidence: **II**

Grade of Recommendation: **B**

Recommendation 2

Regular contact to promote self-care is an option for patients with symptomatic OA of the knee.

Level of Evidence: **IV**

Grade of Recommendation: **C**



Calo Ponderale



Risultato Metanalisi:

Miglioramento funzionale con perdita del 5%

Ideale se dello 0.25% per settimana

Recommendation 3

We recommend patients with symptoms defined by a BMI > 25, should be encouraged to lose weight (5% of body weight) and maintain their program of dietary modification and exercise.

Level of Evidence: **I**

Grade of Recommendation: **A**

Christensen, Ann Rheum Dis. 2007

Taping Rotuleo



RECOMMENDATION 7

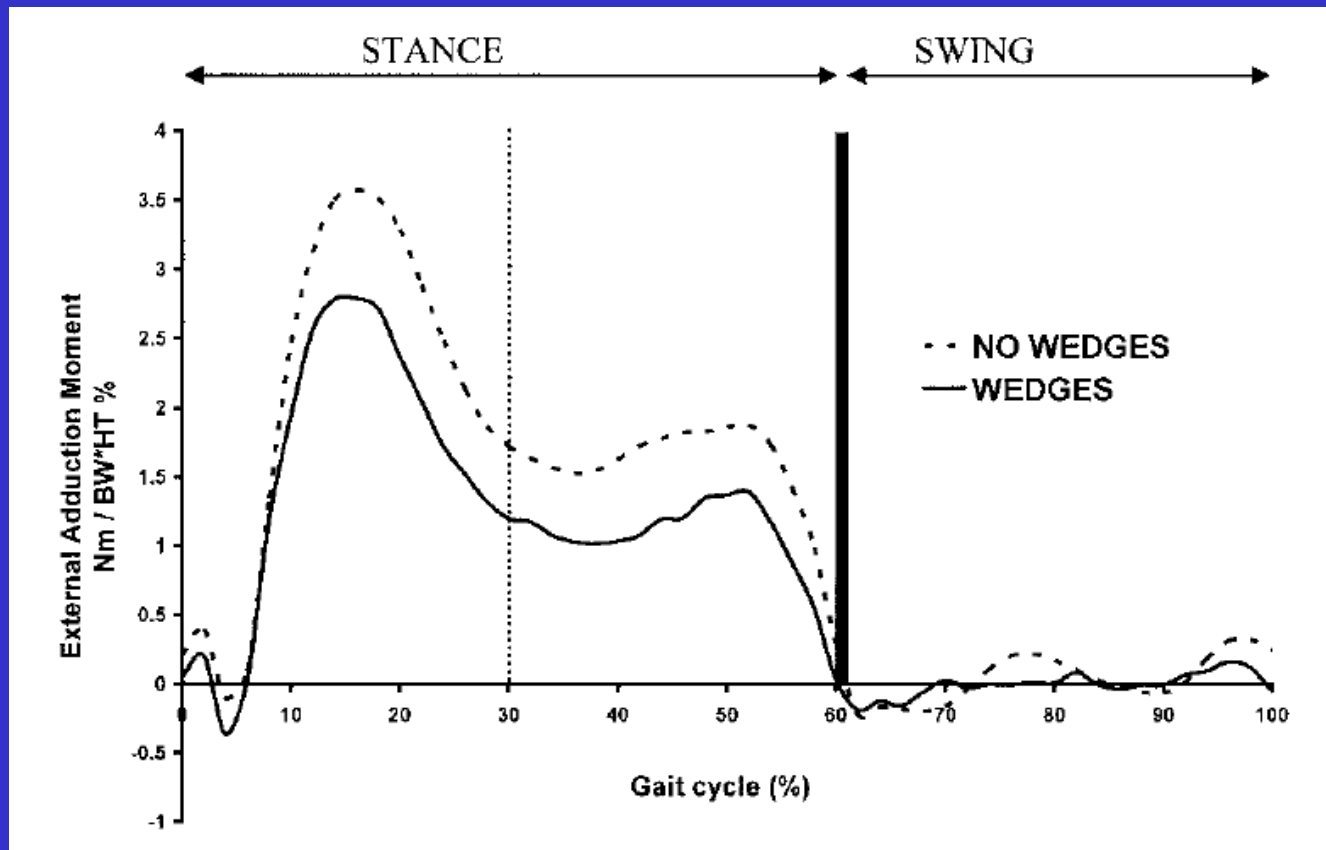
We suggest patients with symptomatic OA of the knee use patellar taping for short term relief of pain and improvement in function.

AAOS Level of Evidence: **II**

AAOS Grade of Recommendation: **B**

Insole lateral wedges





Riduzione del momento adduttore

Andriacchi 2006

Ginocchio Valgizzante

RECOMMENDATION 9

We are unable to recommend for or against the use of a brace with a valgus directing force for patients with medial uni-compartmental OA of the knee.

AAOS Level of Evidence: **II**

AAOS Grade of Recommendation: **Inconclusive**

long-term adherence to brace
and insole treatment is low



Inconclusivo su dolore e funzione
Aumenta autonomia di marcia



Bastone controlaterale
Peso omolaterale

EULAR 2003

Recommendation 12

We recommend glucosamine and/or chondroitin sulfate or hydrochloride not be prescribed for patients with symptomatic OA of the knee.

Level of Evidence: **I**

Grade of Recommendation: **A**

RACCOMANDAZIONE AAOS, EULAR, EBM

TRATTAMENTO INFILTRATIVO CON
ACIDO IALURONICO INDICATO NELLA
GONARTROSI MODERATA

OA Classification

PHASES	AHLABACH(1968)	KELLGREN E LAWRENCE (1957)
0	Normal	Normal
I	tightening of the articular space > 50%	indetermination tightening of the articular space and possible osteophytes
II	total loss of cartilage	evident osteophytes and possible tightening of the articular space
III	friction 5mm	moderate osteophytes, defined tightening of the articular space, sclerosis and possible deformation of the outline bone
IV	friction 5- 10mm	indetermination tightening of the articular space and possible osteophytes
V	friction >10mm	

Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

APPLICAZIONI CLINICHE ACIDO IALURONICO NELLA GONARTROSI

LA NOSTRA ESPERIENZA

STUDIO CLINICO GONARTROSI

Valutare la risposta clinica ad un trattamento con acido ialuronico a basso-medio peso molecolare (Jointex, Chiesi) confrontato con un trattamento con metilprednisolone acetato (Depomedrol, Pfizer) in un gruppo di pazienti affetti da gonartrosi

Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

Materiale e Metodo

- 100 pazienti affetti da gonartrosi (Kellgren-Lawrence radiographic grade I-III).
- 50 pazienti randomizzati (GRUPPO A) hanno ricevuto 3 infiltrazioni intra-articolari settimanali di acido ialuronico (Jointex, 16 mg/2 ml) mentre 50 pazienti randomizzati (GRUPPO B) hanno ricevuto 3 infiltrazioni intra-articolari di metilprednisolone acetato (Depo-Medrol, 40 mg/1 ml).

Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

Materiale e Metodo

- **WOMAC OA Index (Western Ontario and McMaster Universities)**, che valuta la componente dolore (A), rigidità (B) e limitazione funzionale (C) e' stato eseguito pre-trattamento ed a 1, 2, 3, 6, e 12 settimane (0-96)
- Analisi Statistica
- No chirurgie precedenti

Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

GROUP A (HA)

- 24 Males/ 26 Females
- Average Age: 65,4 years; (range, 43-82)
- Pathology: 46 OA, 2 PF OA, 2 Psoriasis
- Baseline WOMAC: 82

GROUP B (STEROID)

- 27 Males/ 23 Females
- Average Age: 66,5 years; (range 46-83)
- Pathology: 48 OA, 1 PF OA, 1 Psoriasis
- Baseline WOMAC: 86

Tecnica Infiltrativa

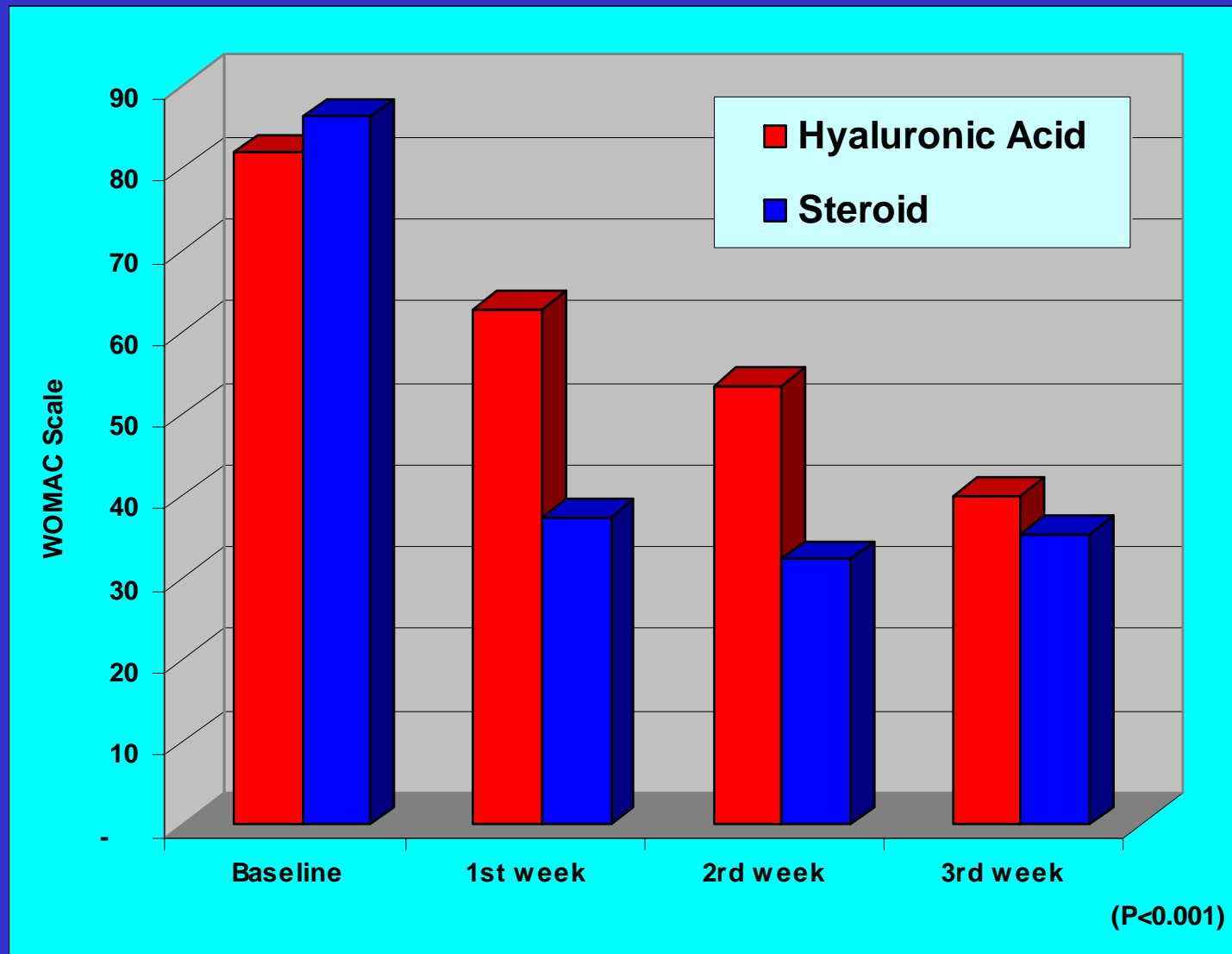
- Disinfezione cutanea
- Anestesia locale con lidocaina
- Aspirazione Acido Ialuronico
- Sostituzione della siringa
- Iniezione di HA



30 % not intra-articular (Jones et al, BMJ, 1993)

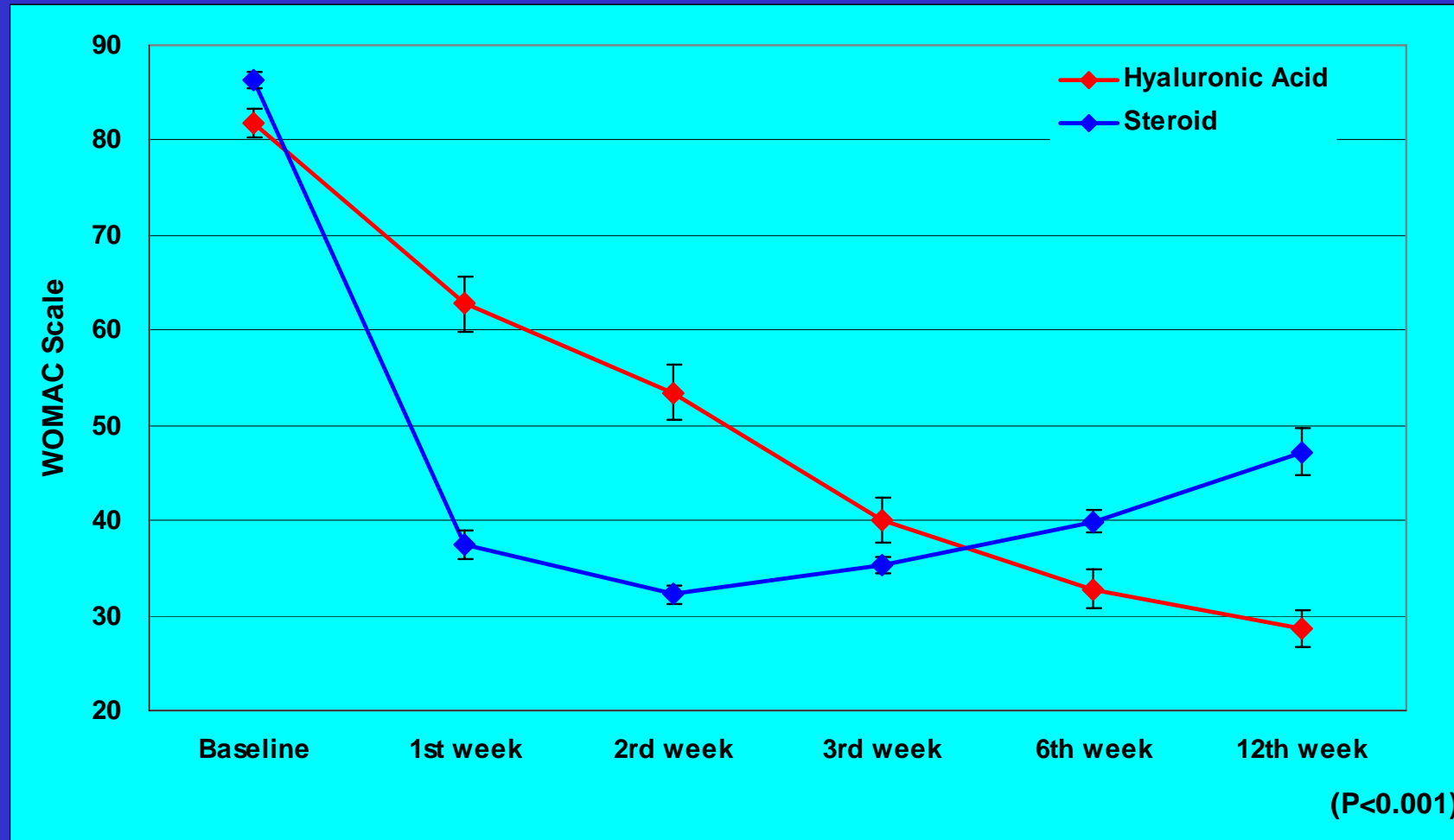
Better supra-patellar pouch (Boyer et. al, Rheumatologie, 1999)

RESULTS AT 3 WEEKS



Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

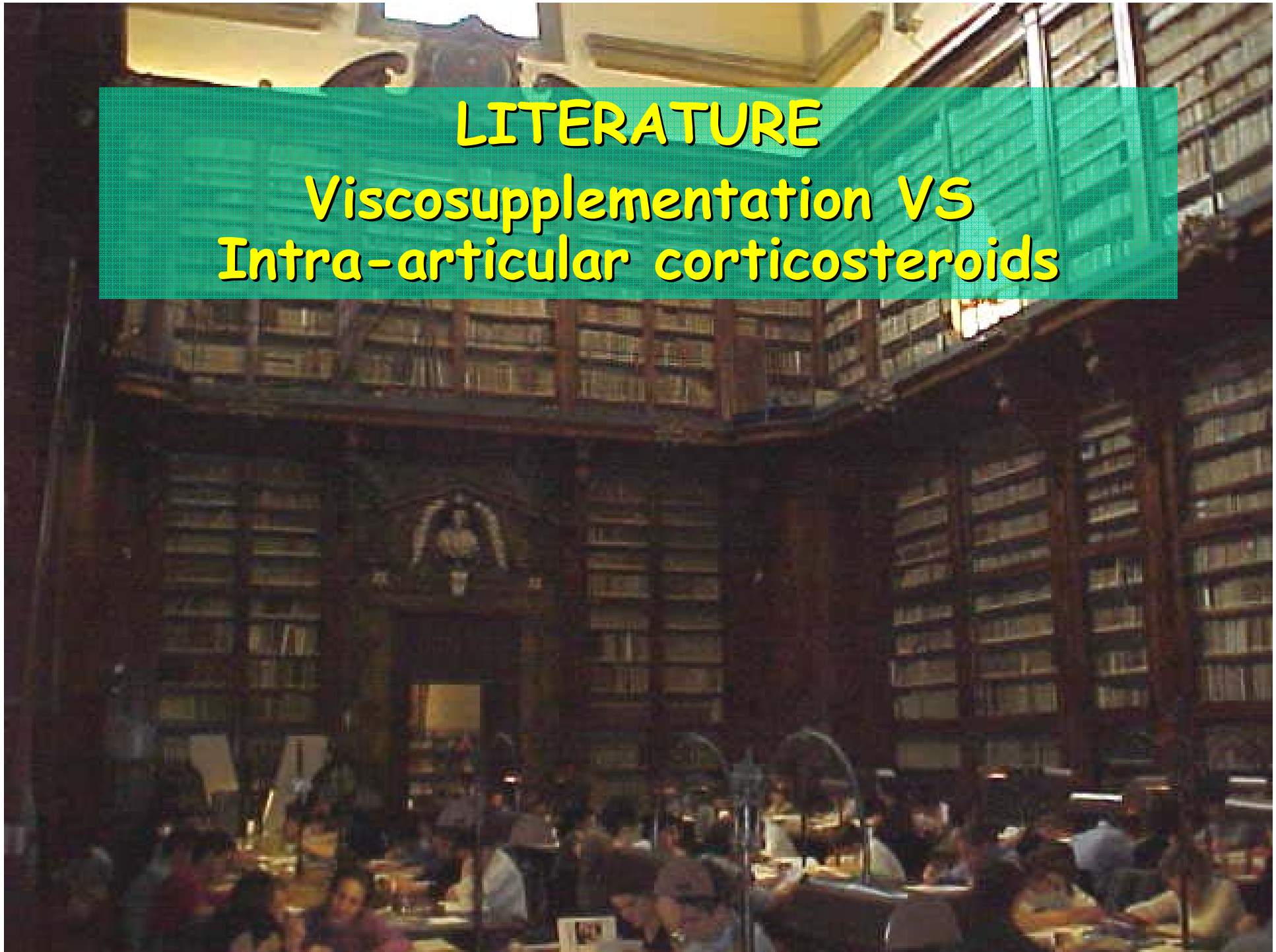
RESULTS



Indelli PF, Baldini A: 2007 Knee Society - Sigascot Combined Meeting, Siena

LITERATURE

Viscosupplementation VS Intra-articular corticosteroids



Viscosupplementation for the treatment of osteoarthritis of the knee (Review)

Bellamy N, Campbell J, Robinson V, Gee T, Bourne R, Wells G



- 76 trials; 10 trials included comparisons against IA corticosteroids
- Comparable efficacy against IA corticosteroids at 1 to 4 weeks postinject.
- Superior to IA corticosteroids at 5 to 13 weeks postinject. (prolonged effect)
- Similar in terms of safety (more local reactions but fewer systemic adverse effects)

CONCLUSIONI

I nostri risultati sono comparabili alla letteratura contemporanea, ma:

- Il Depomedrol ha dimostrato un miglior punteggio WOMAC nelle prime 3 sett.
- L' artrosi femoro-rotulea...difficile da trattare da entrambi gli approcci
- Alcune "Sinoviti post-steroidi" nel gruppo trattato con Depomedrol

INDICAZIONI ALL'USO DI HA NEL GINOCCHIO

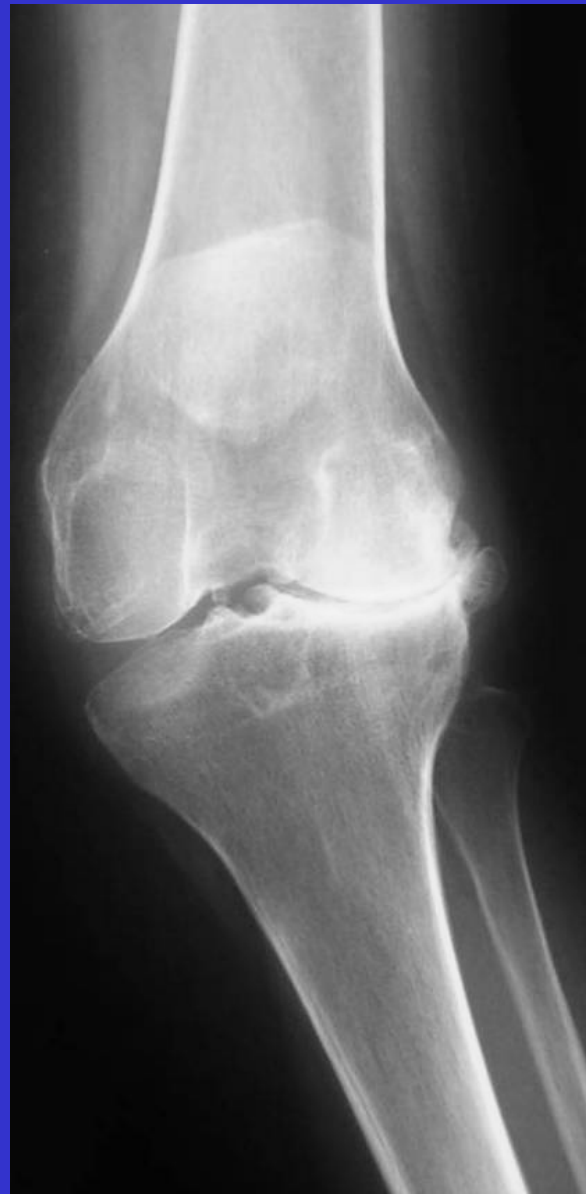
- GONARTROSI: MEDIALE, LATERALE O TRICOMPARTIMENTALE
- PATOLOGIE FEMORO-ROTULEE ISOLATE
- INSTABILITA' CRONICHE COME CONDROPROTETTORE
- POST-MENISCECTOMIA
- FRATTURA OSTEOCONDRALE O "BONE-BRUISE"
- SINOVITI REUMATICHE E NON ("INFLAMMATORY ARTHRITIS")
- TENDINITI ROTULEE ("JUMPER'S KNEE")
- COME ADIUVANTE NEI TRAPIANTI CONDRALI ED OSTEOCONDRALE (OATS, CARTICEL, ACI) E MENISCALI (CMI ED ALLOGRAFT)

TRATTAMENTO CHIRURGICO DELL'ARTROSI DI GINOCCHIO

VARISMO



VALGISMO



Il “nuovo” paziente artrosico

Età



Flessione



Attività



Quali opzioni possiamo offrire al “nuovo” paziente?

1997

INSALL/BURSTEIN II Posterior Stabilized Modular Knee System



Surgical Technique

INSALL/BURSTEIN is a trademark of The Hospital for Special Surgery, New York, New York.

INSALL/BURSTEIN II Constrained Condylar Modular Knee System

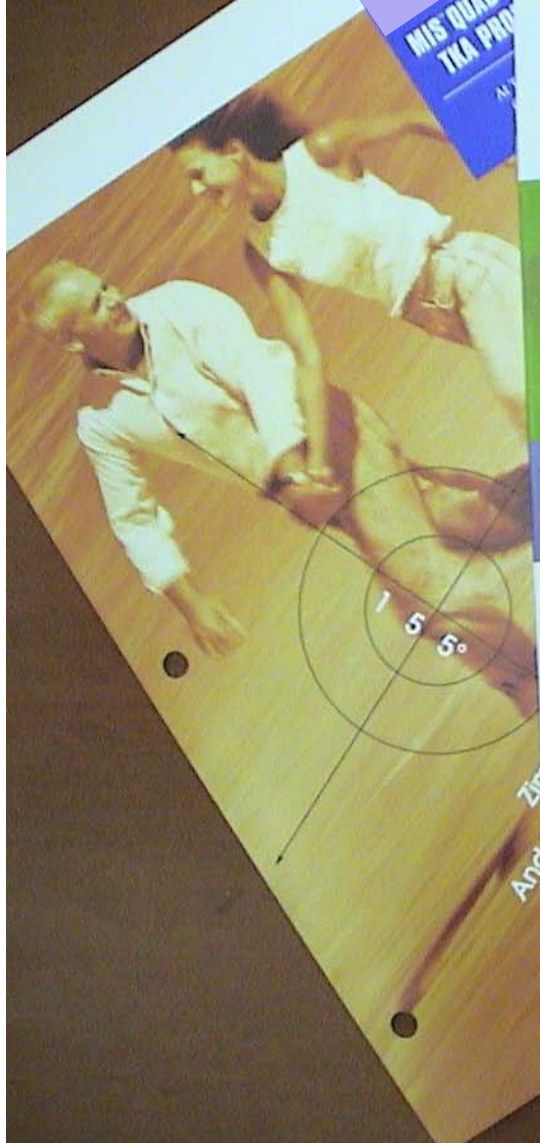


Surgical Technique

INSALL/BURSTEIN is a trademark of The Hospital for Special Surgery, New York, New York.

2011

MIS QUAD-S
TKA PRO



MAYO CONSERVATIVE
HIP PROSTHESIS

Living Life While Looking
To The Future



Indicazioni chirurgiche

Fallimento terapia

conservativa

per almeno 6 - 12 mesi

- Lavaggio artroscopico
- C'è un ruolo per trapianto cartilagineo ?
- Osteotomia tibiale (o femorale)
- Protesi Monocompartimentale
- Protesi Totale

Arthroscopia



Surgical Intervention

Recommendation 18

We recommend against performing arthroscopy with debridement or lavage in patients with a primary diagnosis of symptomatic OA of the knee.

Level of Evidence: **I and II**

Grade of Recommendation: **A**

There is 'gold' level evidence that arthroscopic debridement has no benefit for undiscriminated OA (mechanical or inflammatory causes).

Cochrane 2008



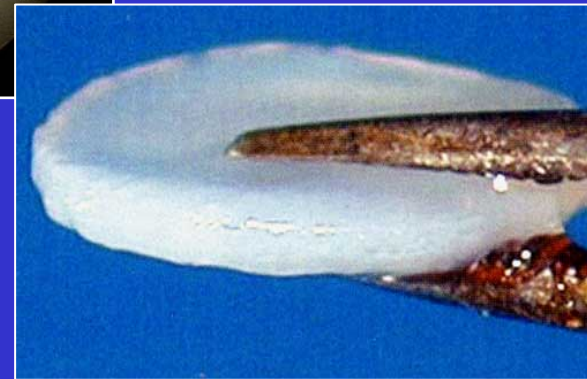
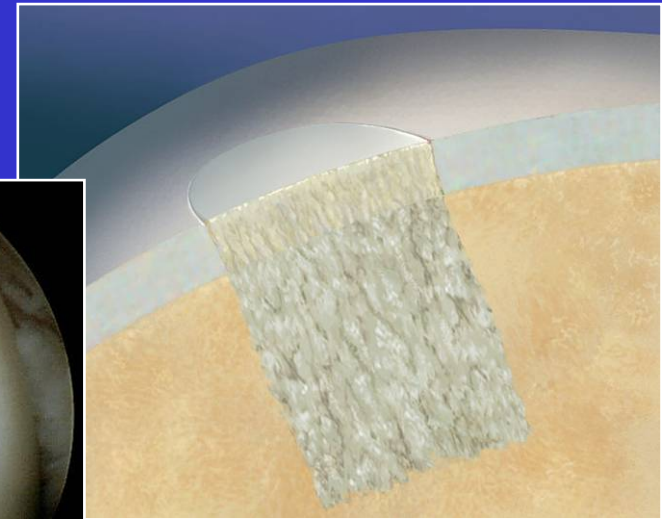
Recommendation 19

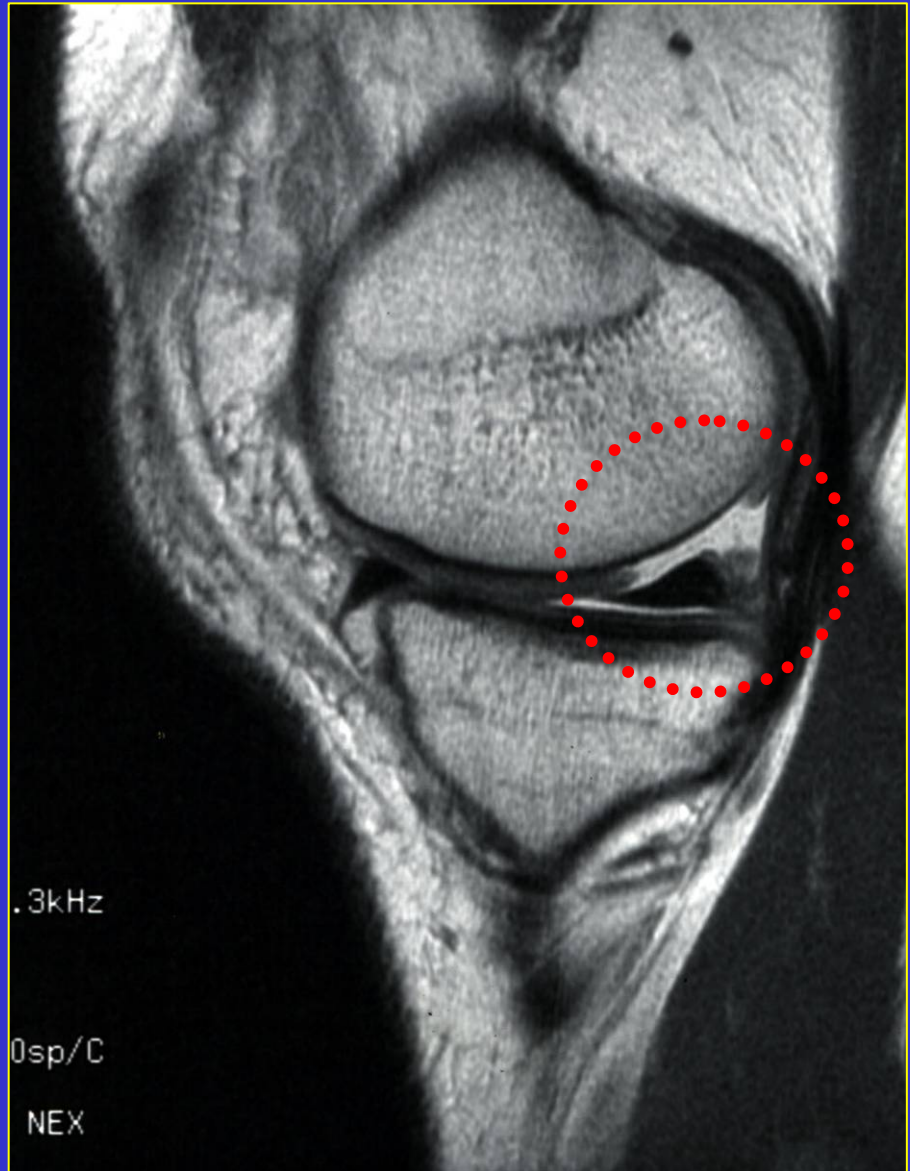
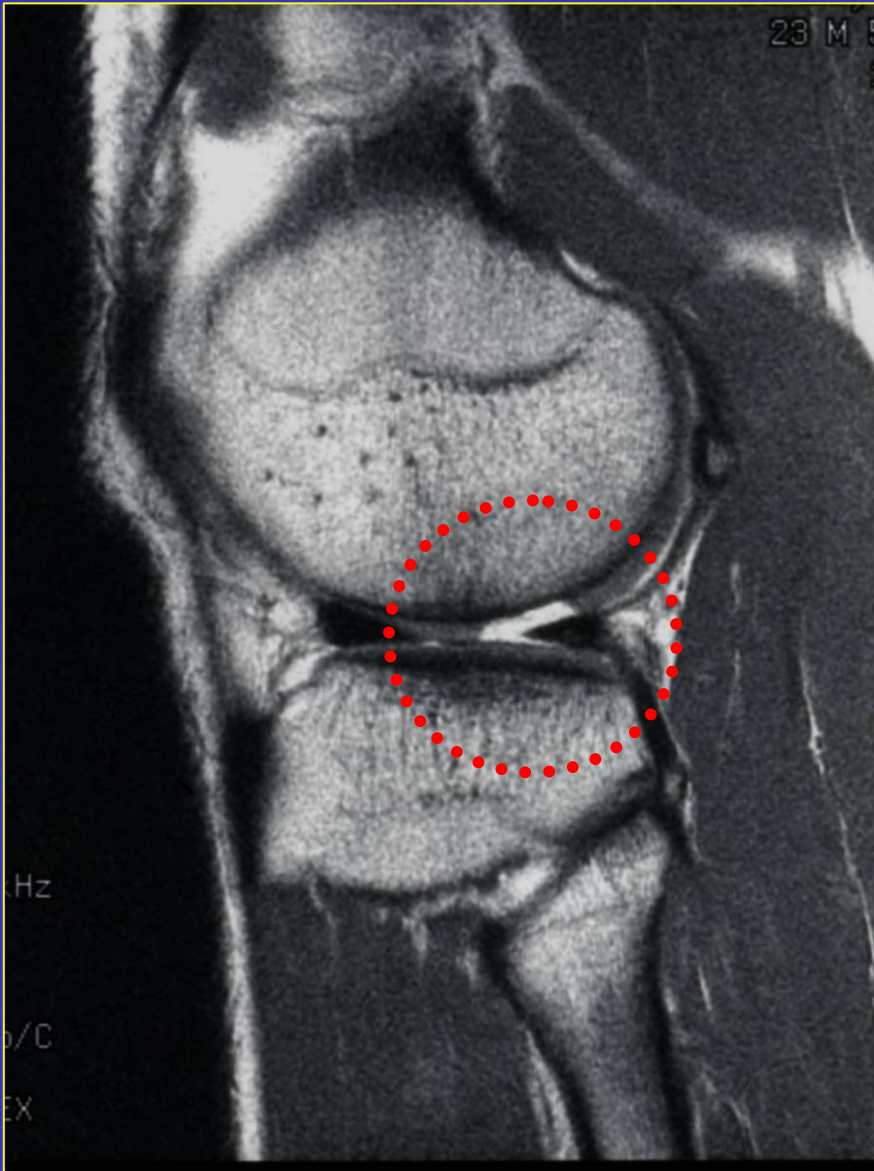
Arthroscopic partial meniscectomy or loose body removal is an option in patients with symptomatic OA of the knee who also have primary signs and symptoms of a torn meniscus and/or a loose body.

Level of Evidence: **V**

Grade of Recommendation: **C**

Trapianti Cartilaginei







Osteotomy

Recommendation 21

Realignment osteotomy is an option in active patients with symptomatic unicompartamental OA of the knee with malalignment.

Level of Evidence: **IV and V**

Grade of Recommendation: **C**

Paziente giovane < 55 aa

Attivo - lavoro manuale

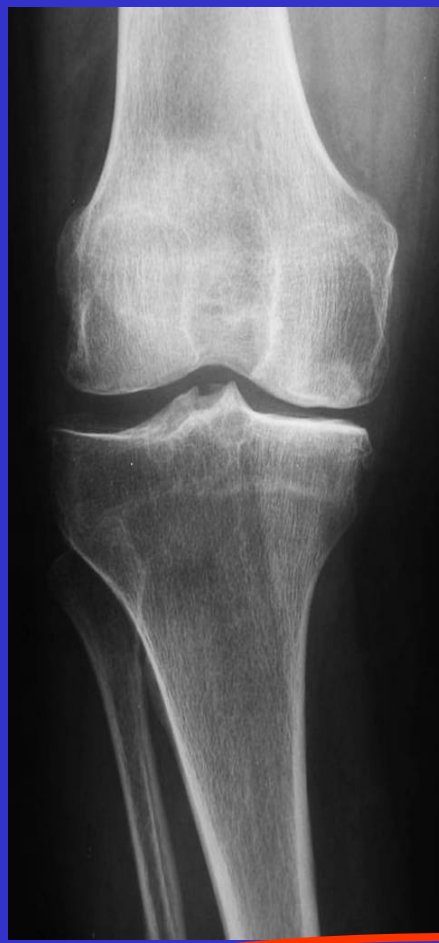
Necessità di correre o saltare

Deformità assiale (varo o valgo)

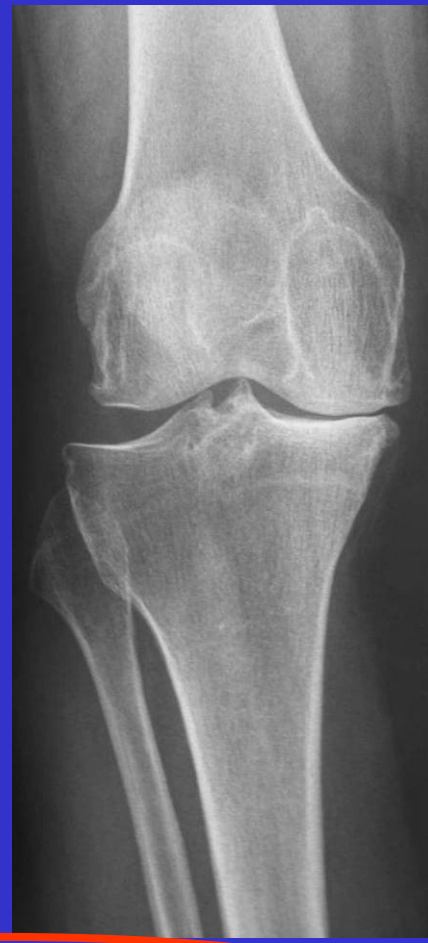
Gradi artrosi



Grado I



Grado II



Grado III



Grado IV

Placca vs Emicallotassi



THE JOURNAL OF
Knee
Surgery
Incorporating Arthroplasty and Sports Medicine

High tibial valgus osteotomy for medial gonarthrosis:
a 10- to 21-year study.



10 yrs survivorship 70%

AGLIETTI, BALDINI, et al J Knee Surg. 2003

Protesi monocompartimentale (parziale)

Età > 50 aa

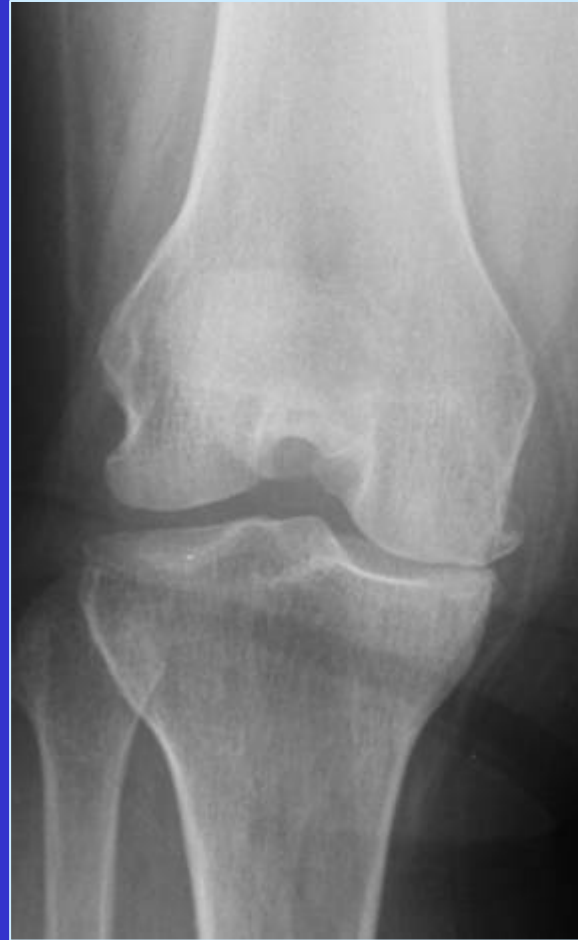
Non esegue attività ad alto

impatto (corsa - salti)

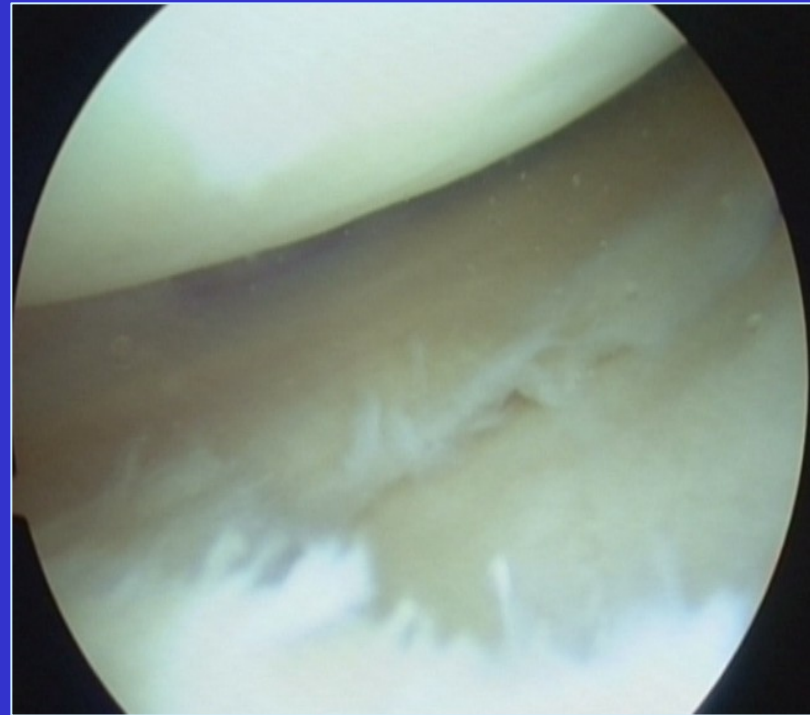
Deformità assiale moderata

Dolore localizzato e sottocarico



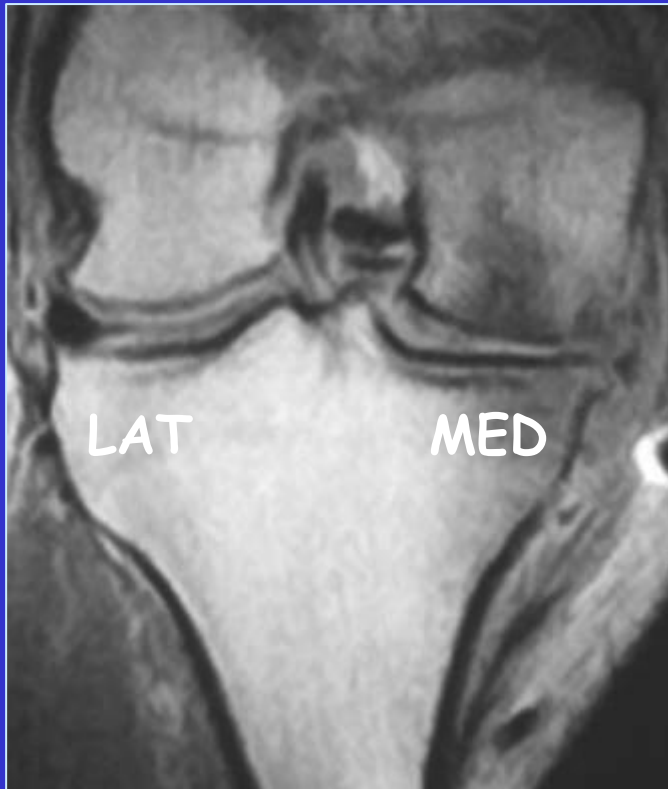


Compartimento opposto



Sano ! Piccola usura tollerata
specialmente se femoro-rotulea

RM utile



REVISIONE FACILE



Protesi Totale di Ginocchio

Età > 55 aa (oppure casi eccezionali)

Non esegue attività ad alto impatto

(corsa - salti)

Qualsiasi deformità assiale

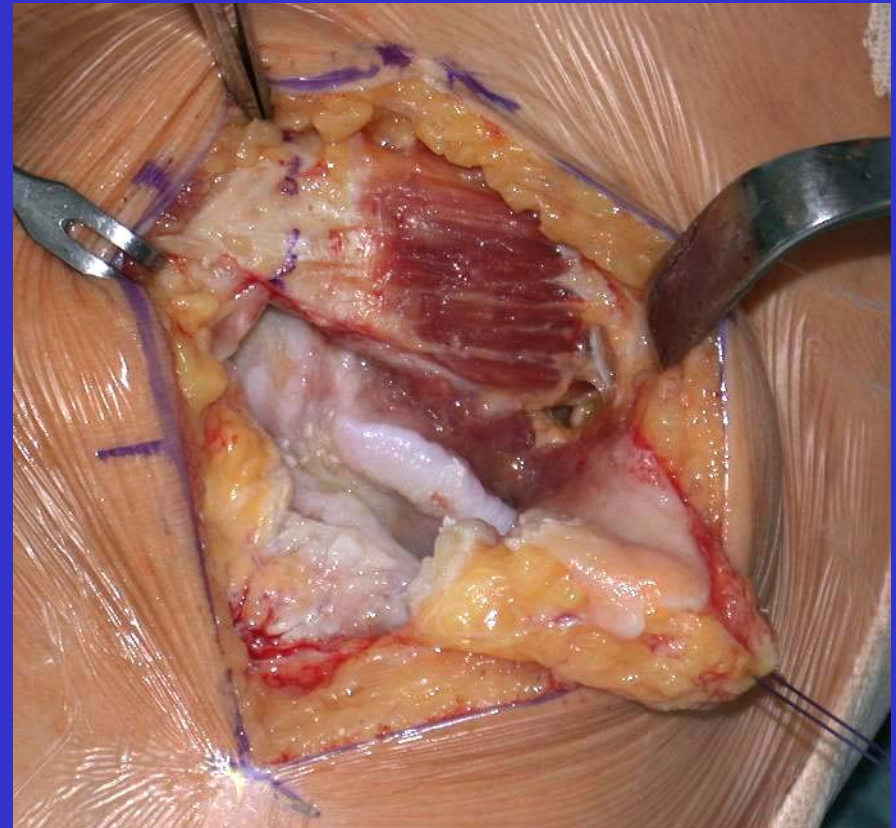
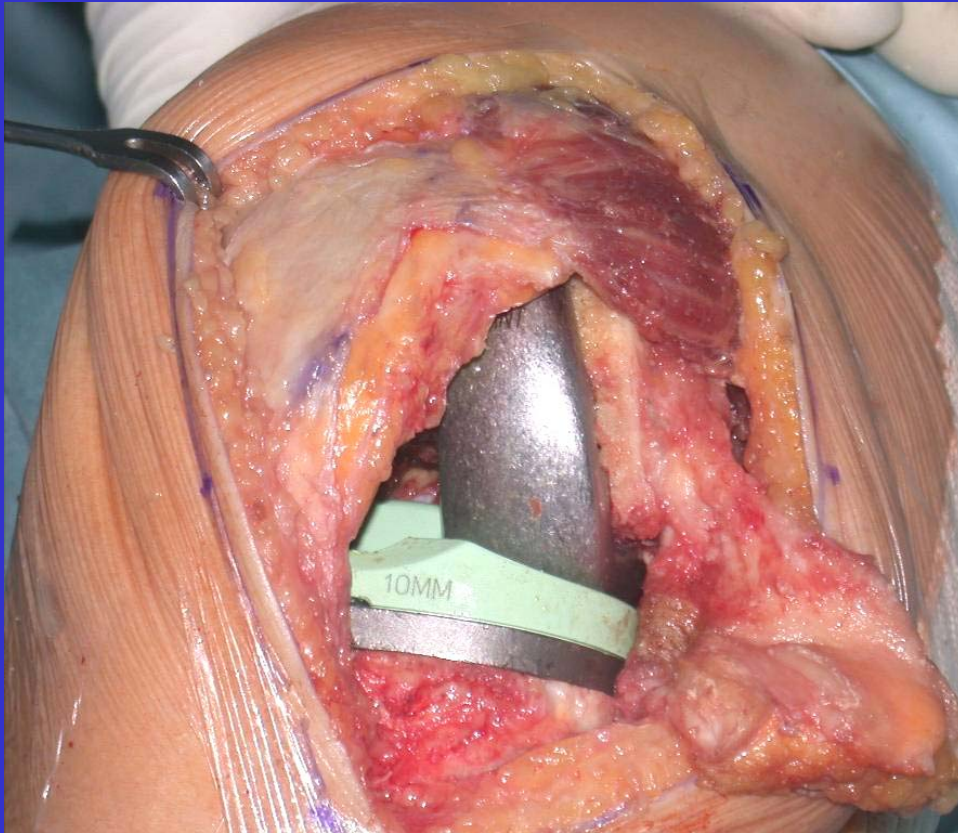
Attività quadricipitale presente



S



Approccio mini-invasivo

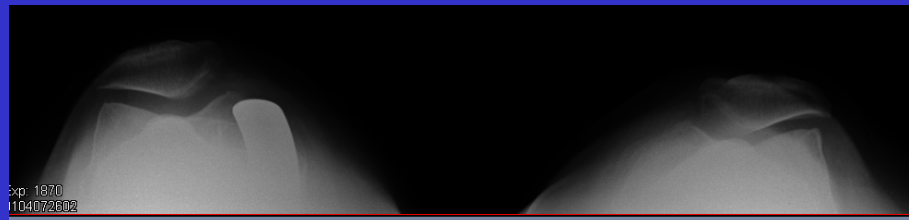
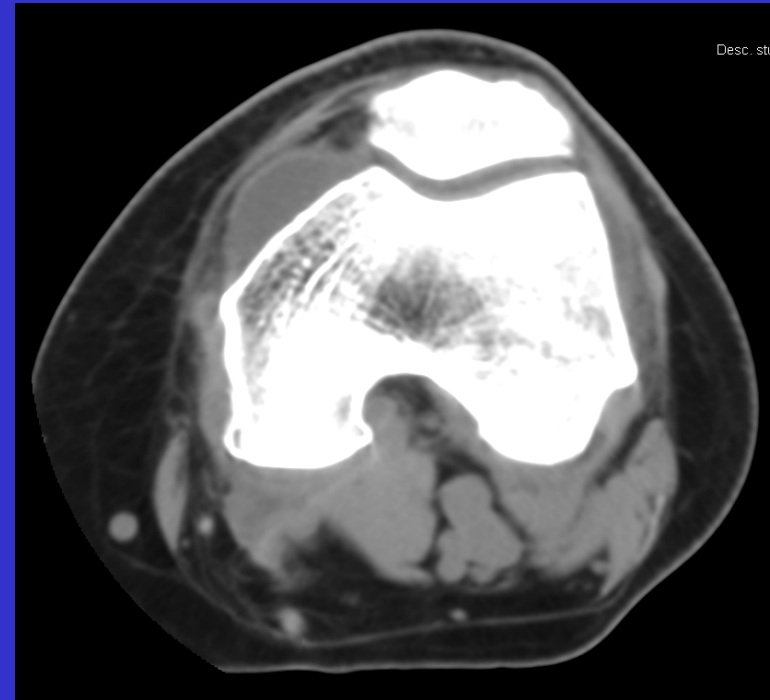




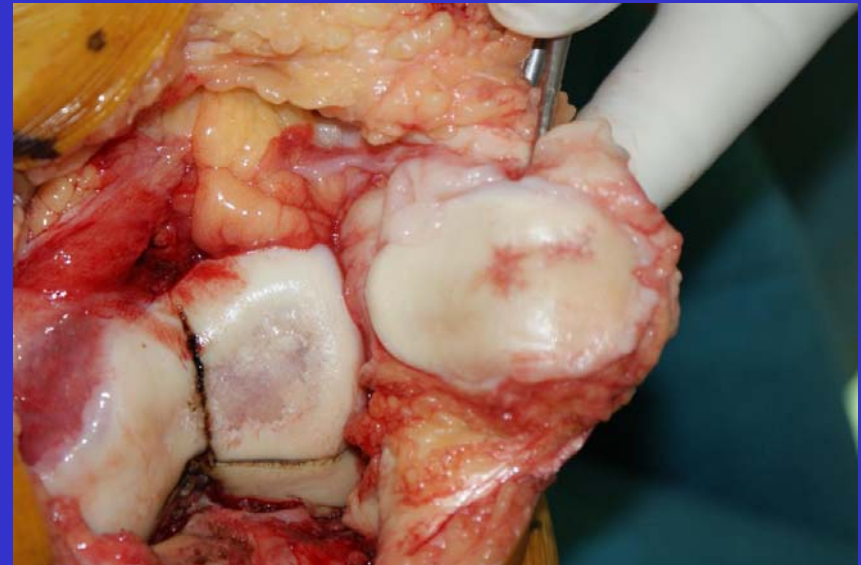
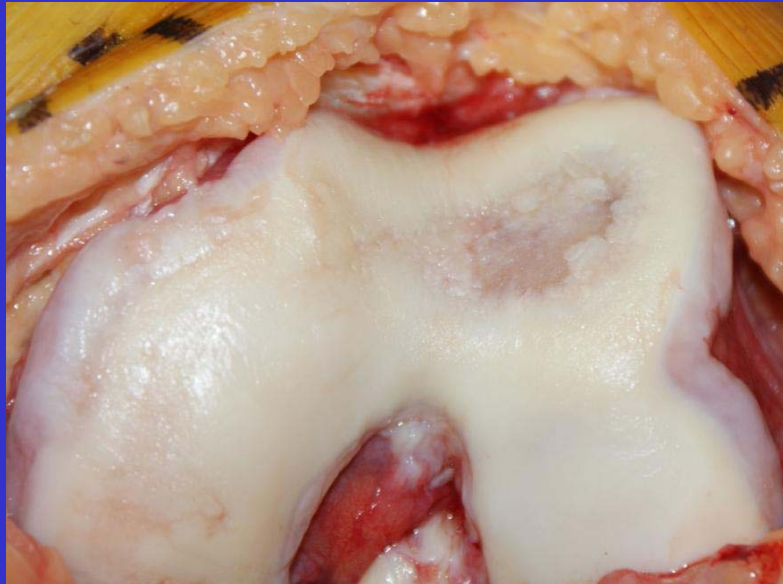
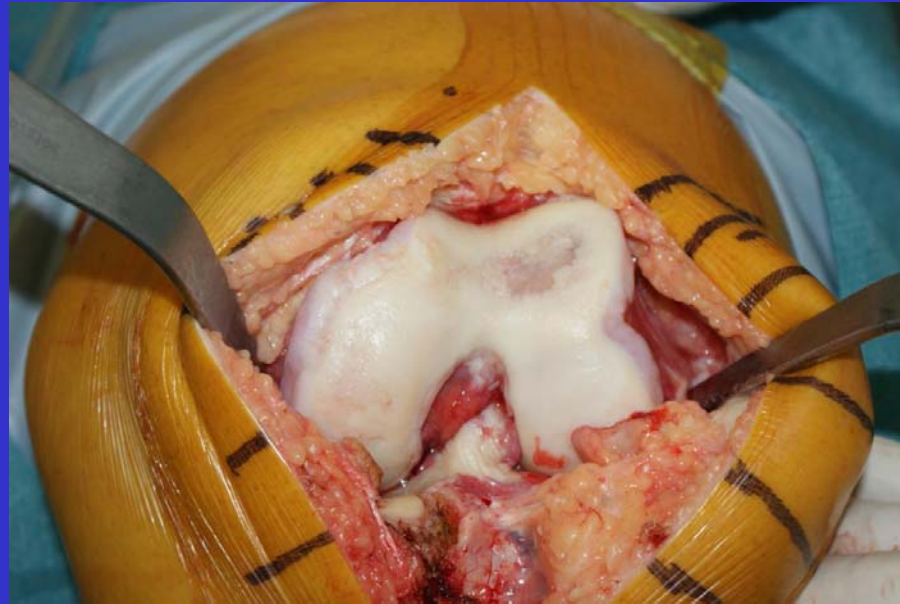
Rapido recupero

Profilassi antitromboembolica

Controllo perdite ematiche

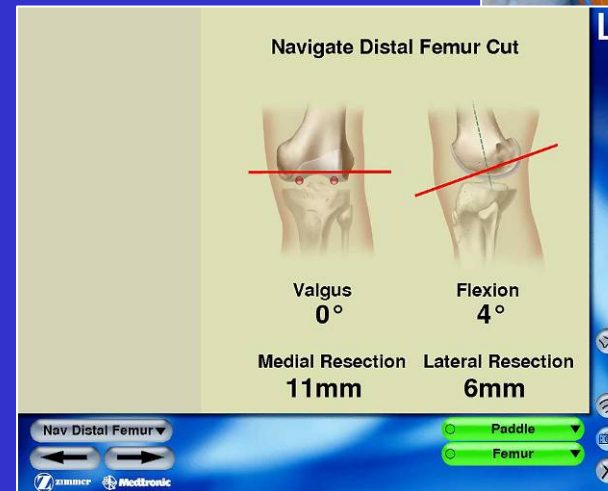
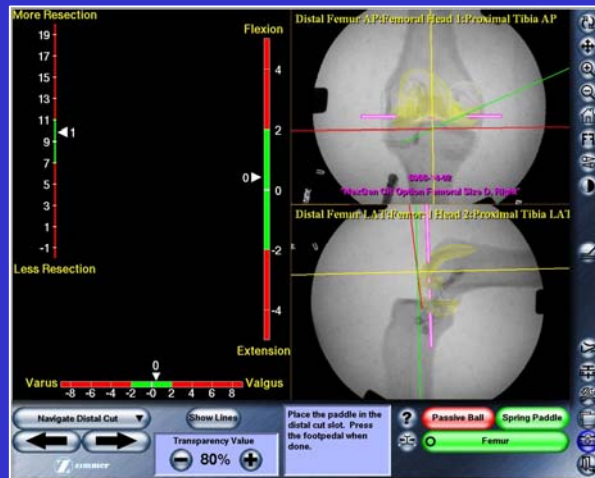
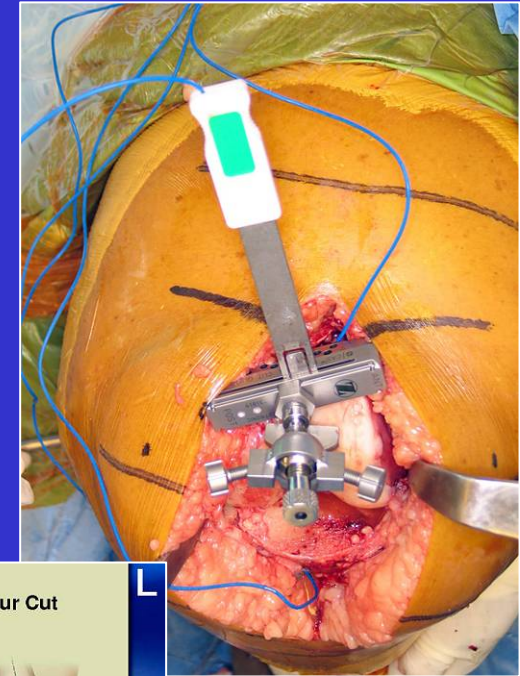
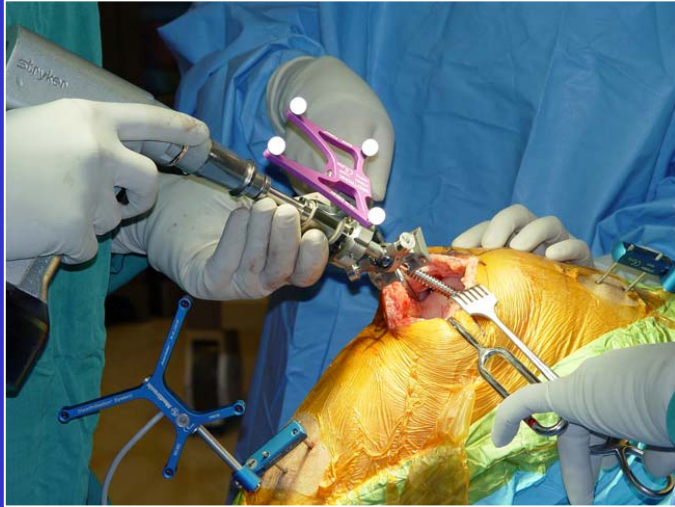


52 YO MALE, ACTIVE, SUCCESSFUL CONTRALATERAL UNI, MEDIAL JOINT LINE PAIN, NO PF SYMPTOMS





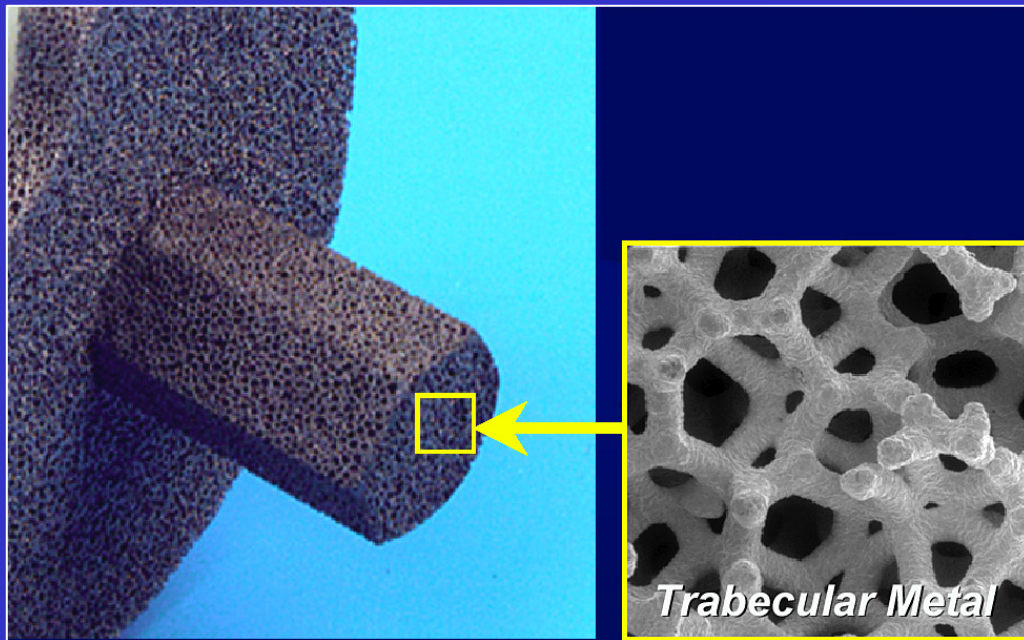
Computer Guided Surgery





New Materials

Trabecular metal



Successo della Protesi Totale



Successo della Protesi Totale

Paziente informato (classi preoperatorie)

Chirurgia specializzata (rapidità-invasività)

Controllo di DOLORE - EMBOLIE - EMATOMA

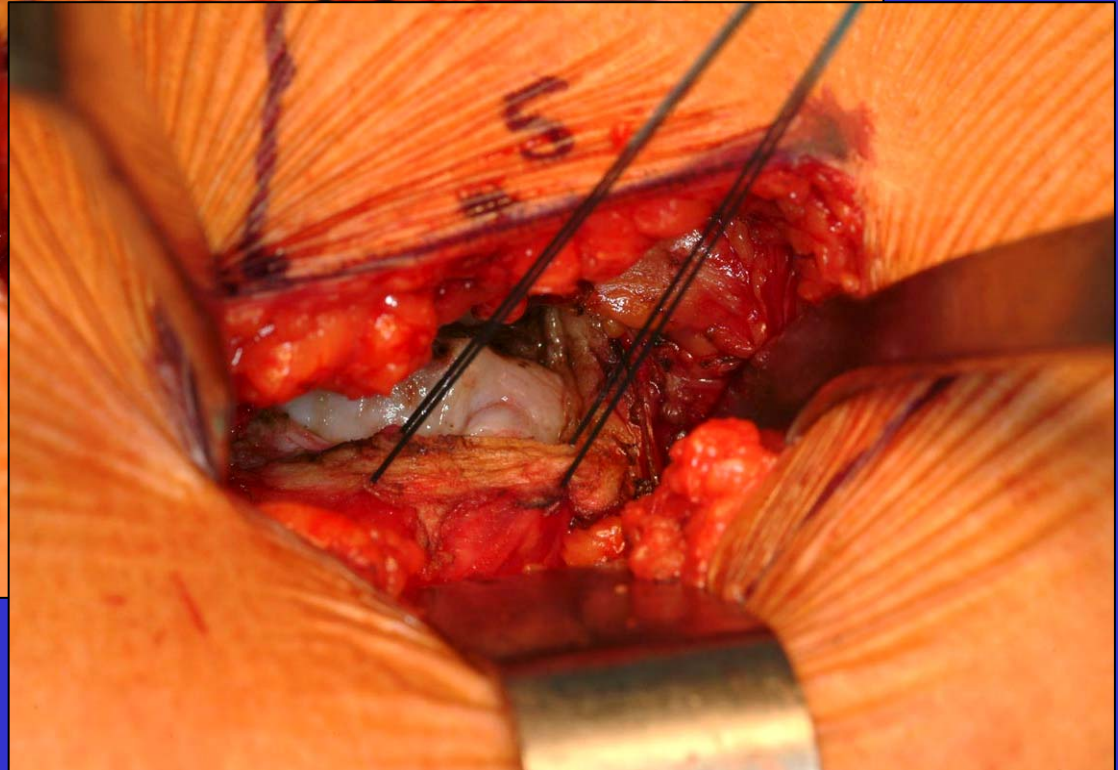
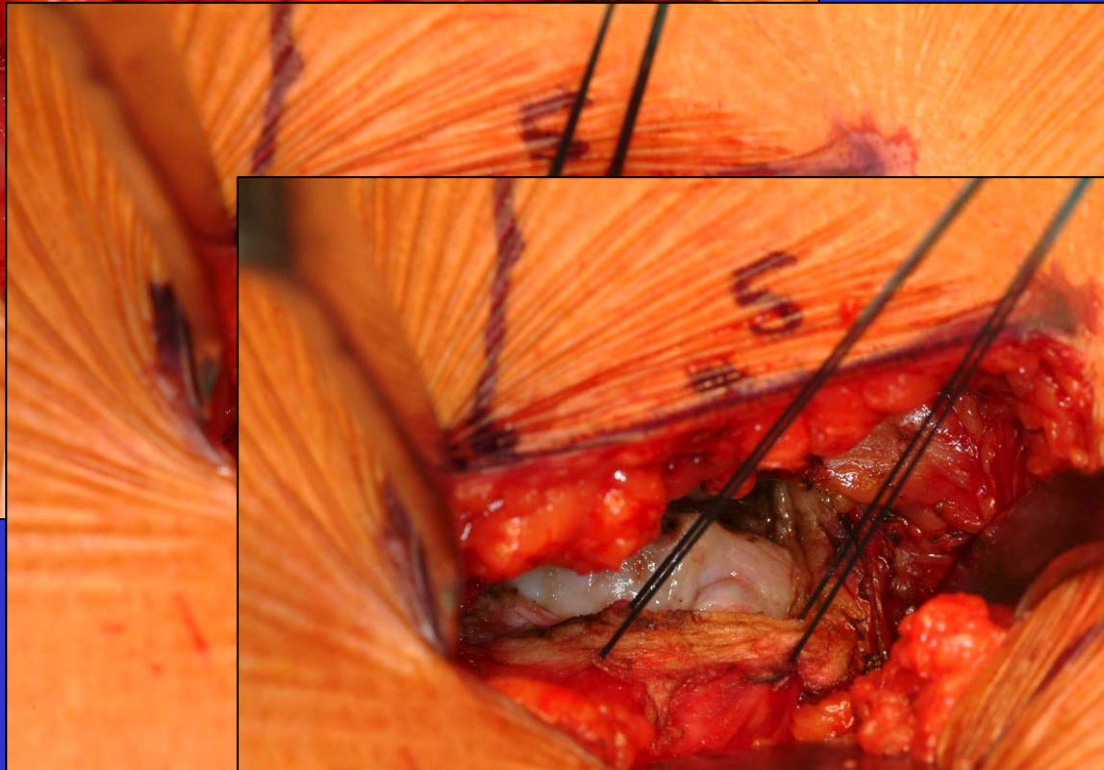
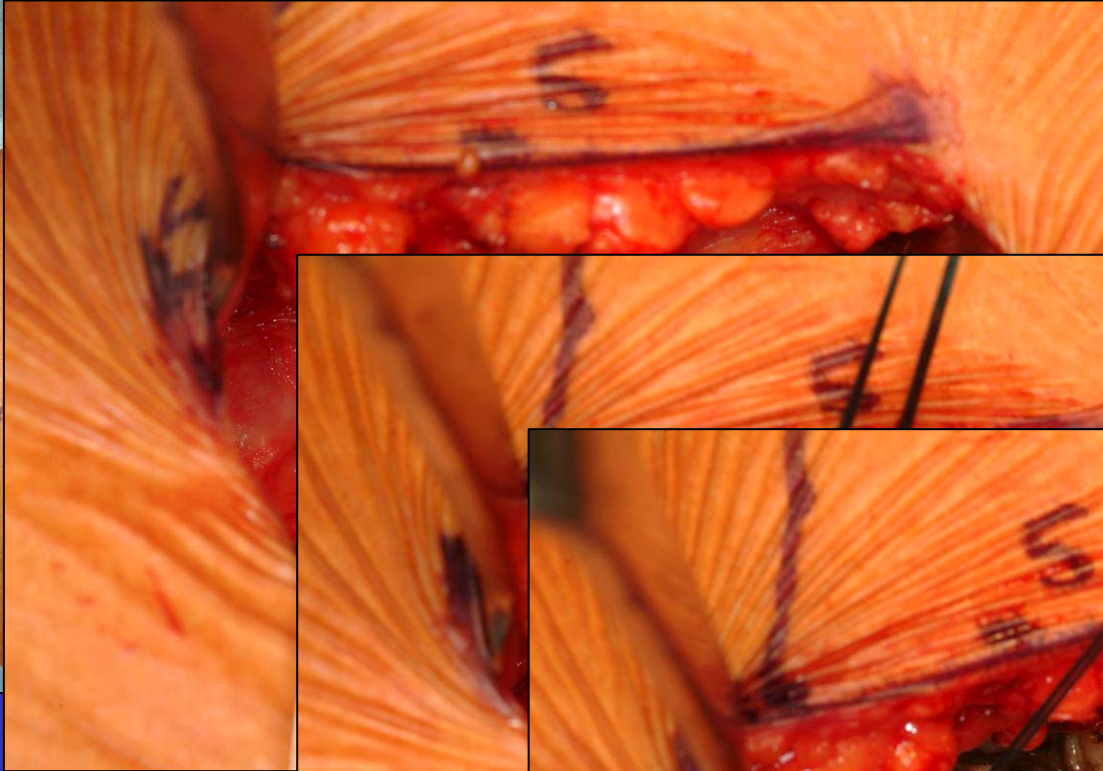
Fisioterapista e chirurgo collaboranti

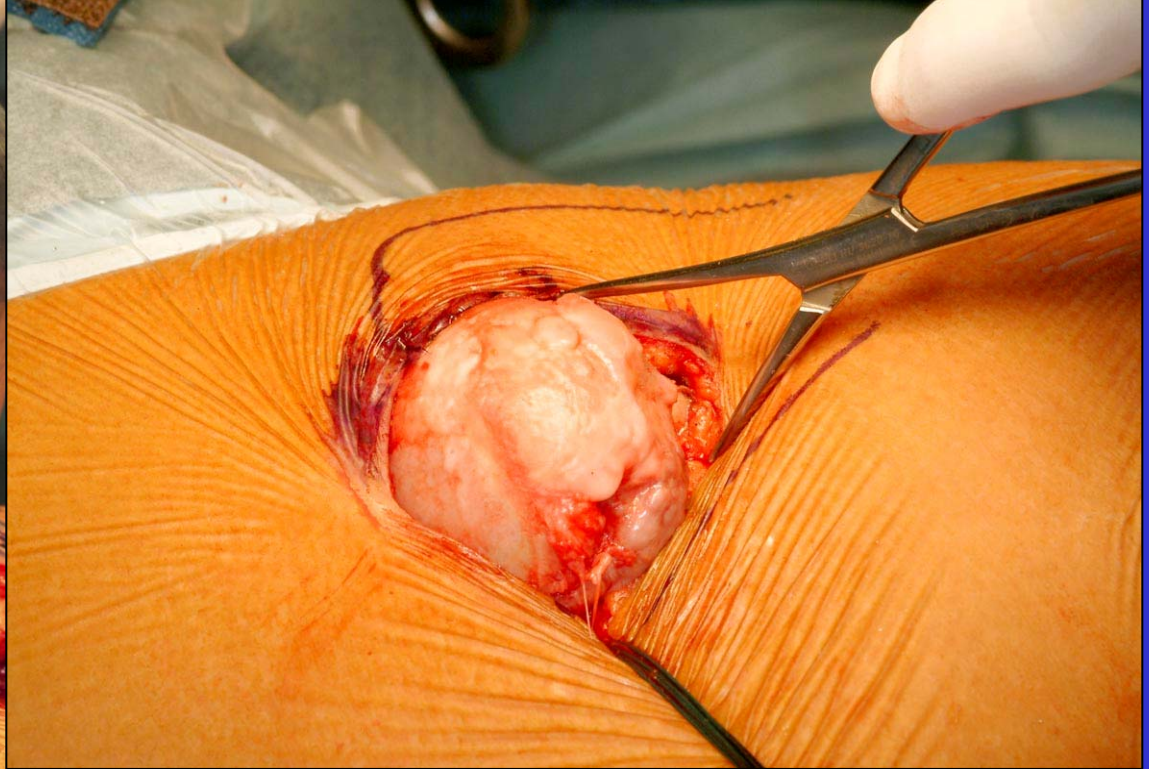
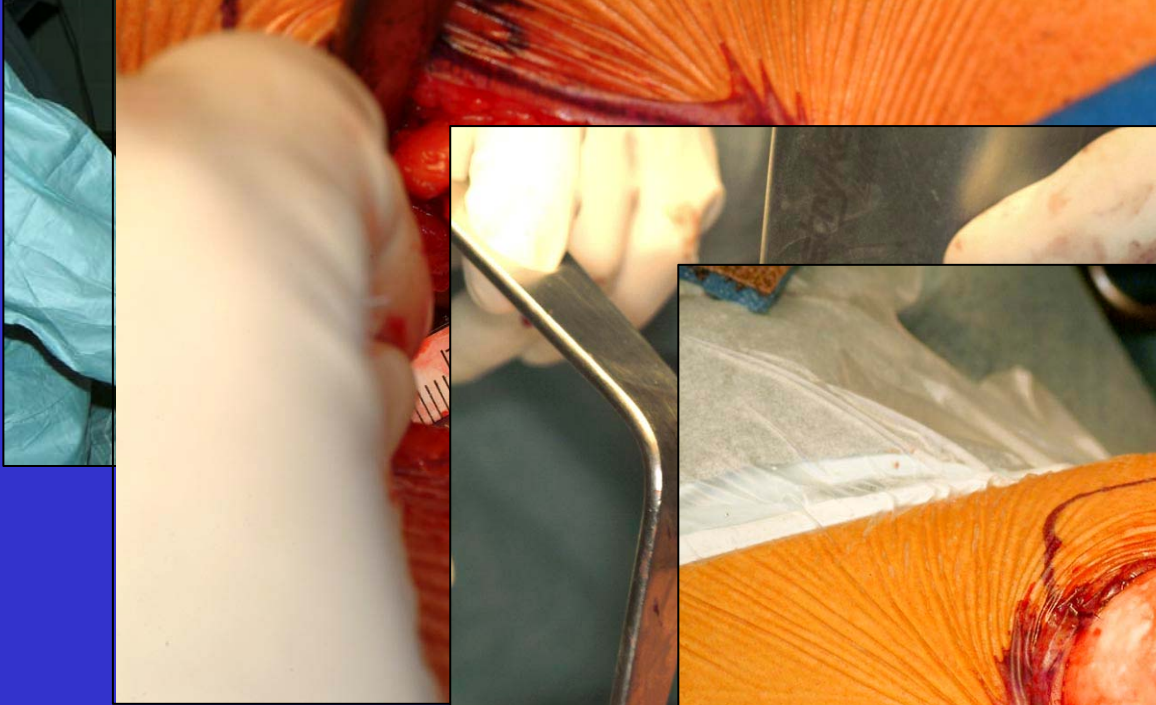
*TRATTAMENTO DELL'ARTROSI DI ANCA NEL
PAZIENTE GIOVANE ATTIVO*

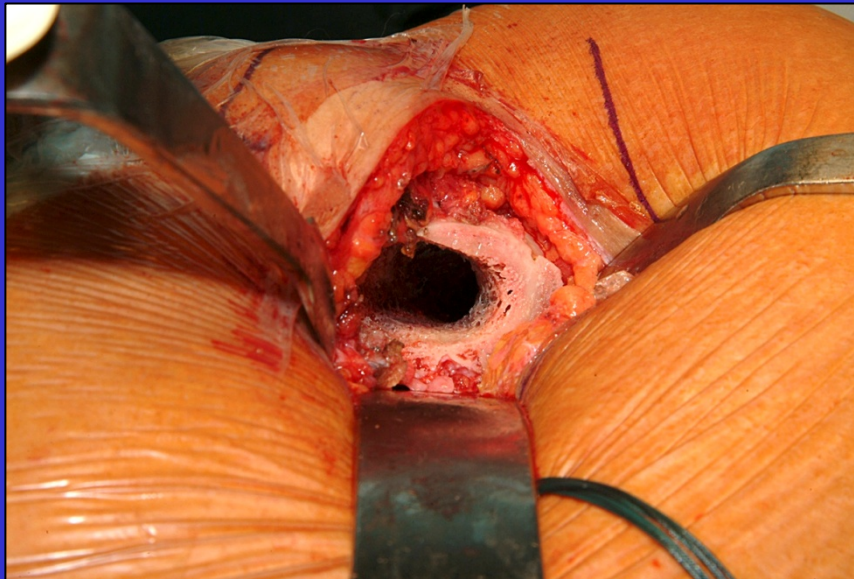
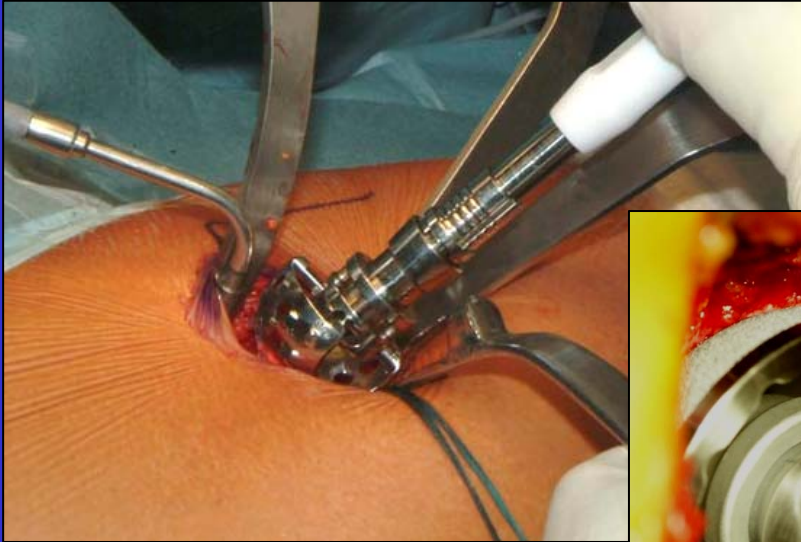
- IL TRATTAMENTO CONSERVATIVO DELLA COXARTROSI HA INDICAZIONI PIU' RISTRETTE RISPETTO ALLA GONARTROSI
- FONDAMENTALE E' IL MANTENIMENTO DELL'ARTICOLARITA':
L' IDROKINESITERAPIA RAPPRESENTA LA NOSTRA PRIMA SCELTA

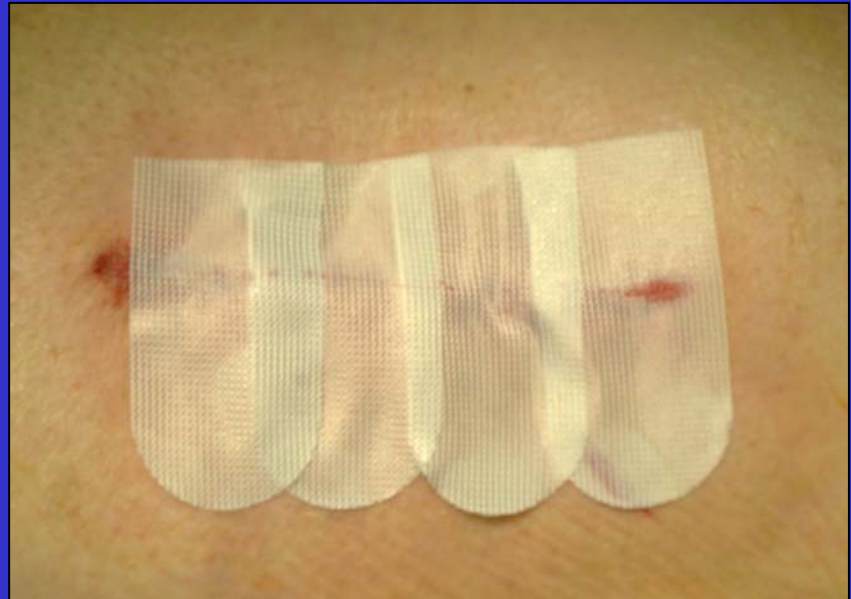
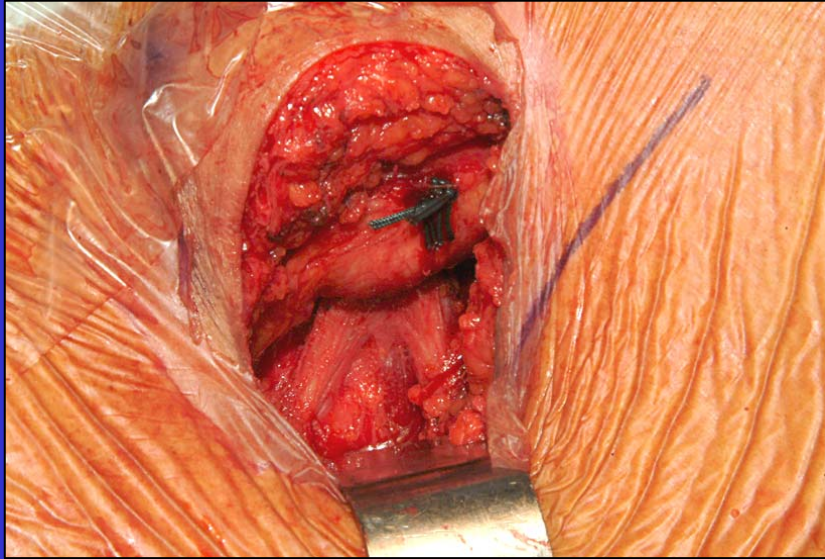
TRATTAMENTO CHIRURGICO: PROTESI TOTALE D'ANCA

- ATTENTA PREPARAZIONE DEL PAZIENTE
- TECNICA MINI-INVASIVA
- UTILIZZO DI TECNOLOGIE MODERNE E MATERIALI "BONE-FRIENDLY"
- RIABILITAZIONE ACCELERATA











GIORNO 0



GIORNO 1



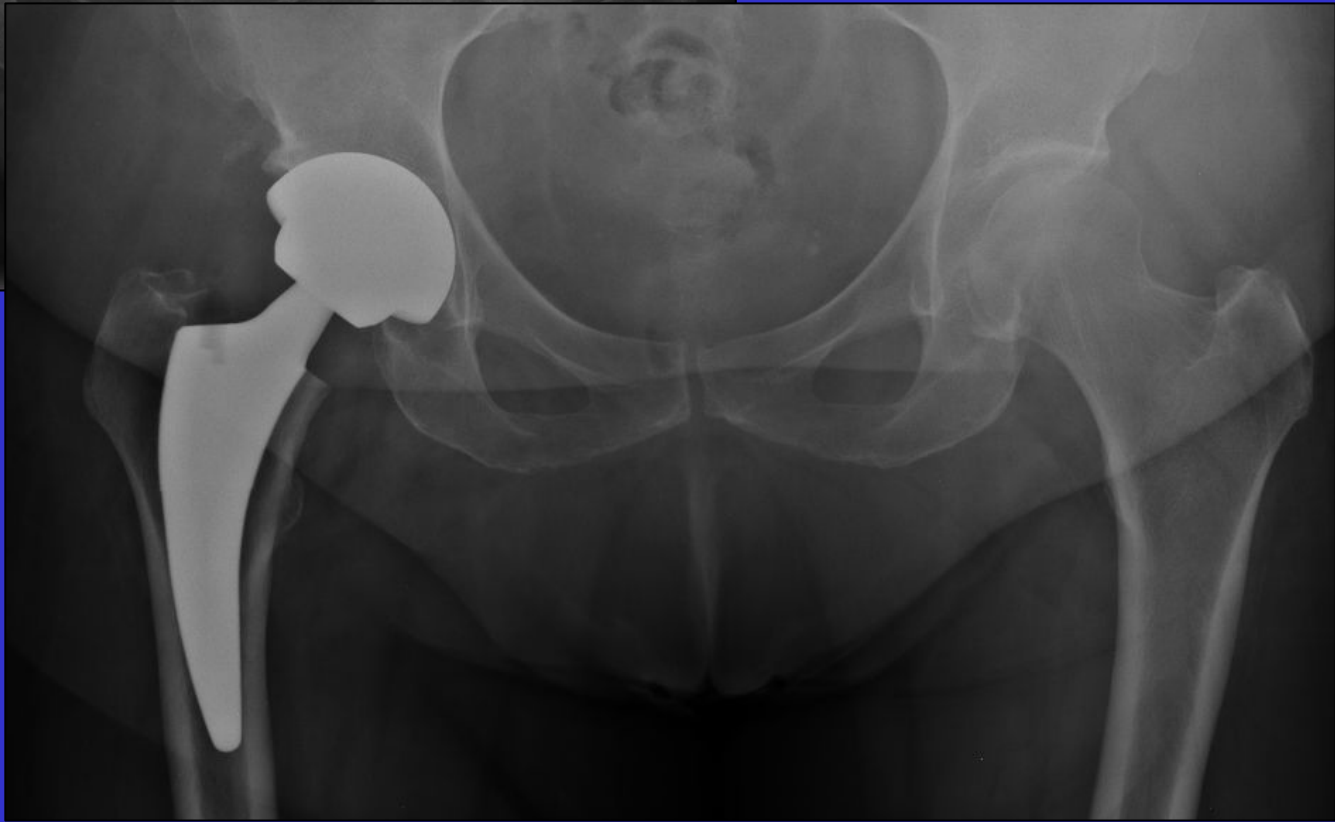
GIORNO 2



GIORNO 5

D

32



CONCLUSIONI

IL TRATTAMENTO DELL'ARTROSI DI ANCA
E GINOCCHIO NEL PAZIENTE SPORTIVO
OVER FIFTY E' MULTIMODALE

L'APPROCCIO MULTIDISCIPLINARE
COINVOLGE IL MEDICO DI MEDICINA
GENERALE, IL MEDICO DELLO SPORT, IL
FISIATRA, IL REUMATOLOGO,
L'ORTOPEDICO ED IL FISIOTERAPISTA

LA SODDISFAZIONE DEL PAZIENTE E'
L'OBBIETTIVO PRINCIPALE DI TUTTI GLI
SFORZI

GRAZIE

