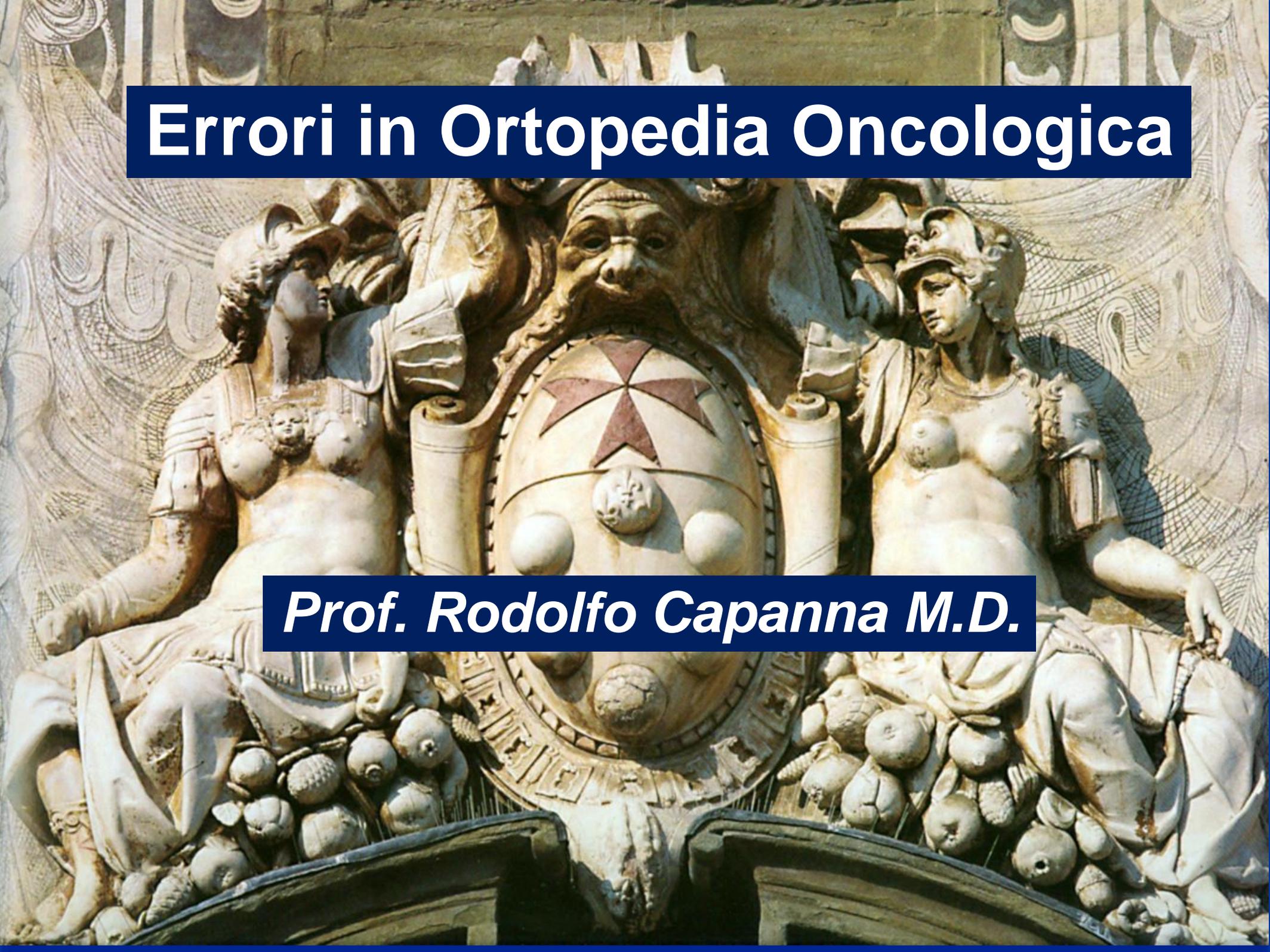


Errori in Ortopedia Oncologica

A detailed marble relief sculpture from the Palazzo Medici in Florence, Italy. It depicts the Medici family: Cosimo de' Medici on the left, Lorenzo de' Medici in the center, and Giuliana de' Medici on the right. They are seated on a throne, with a large shield featuring a red cross on a white background in the center. The sculpture is surrounded by intricate carvings of shells and other decorative elements.

Prof. Rodolfo Capanna M.D.

Errori in Ortopedia Oncologica



Diagnosi

Biopsia

Trattamento chirurgico

Non credere alle apparenze



X-rays ingannevoli

RX: *“osteoartriosi
con calcinosi
meniscale...”*



79Y

E

HLA

Interruzione corticale



Estensione Profondità (> 2/3 spess.cort.)

CS grado 2

Cor>Sa

X-rays ingannevoli

OS parostale



Osteite

Displasia fibrosa



Entesopatia cronica
ileopsoas

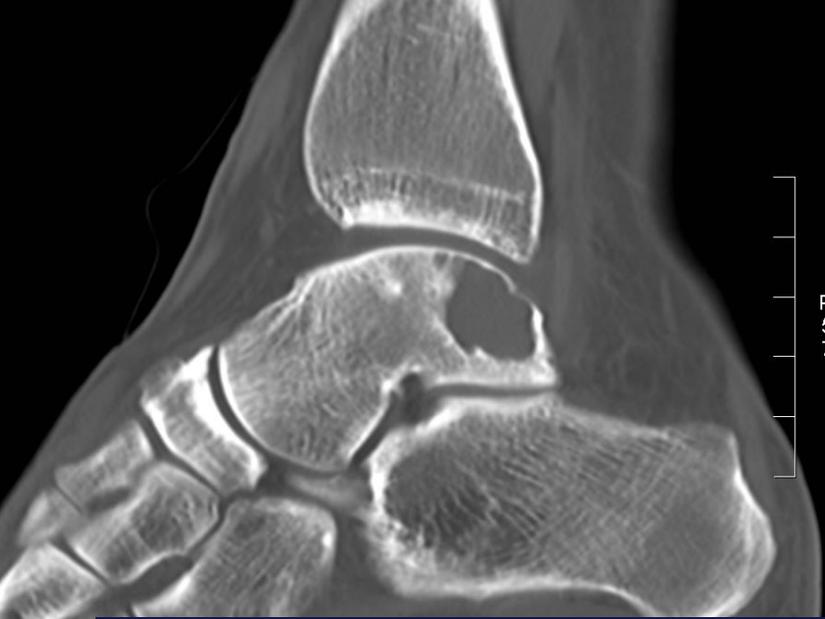
CT SCAN ingannevole

Ragazza, aa 25, saltatrice ad ostacoli

*"Ganglio
artrogeno,
cisti mucosa
secondaria"*

...

Ragazza, aa 22, obesa, pregresso trauma



P
5
7

TCG con CA secondaria



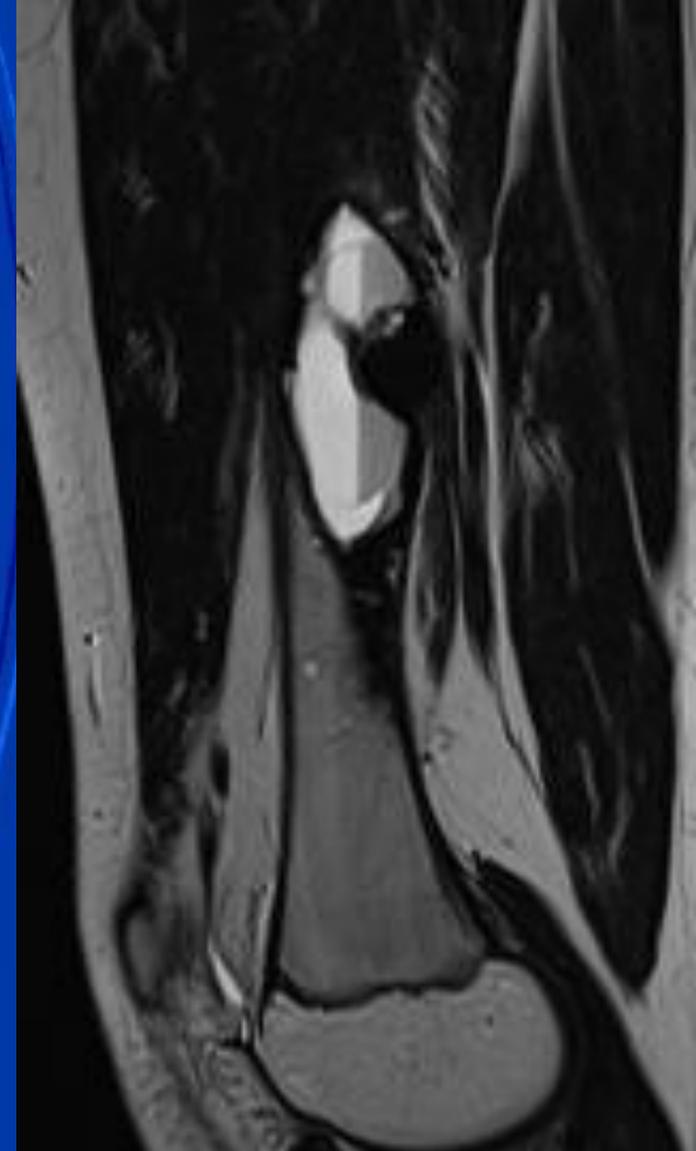
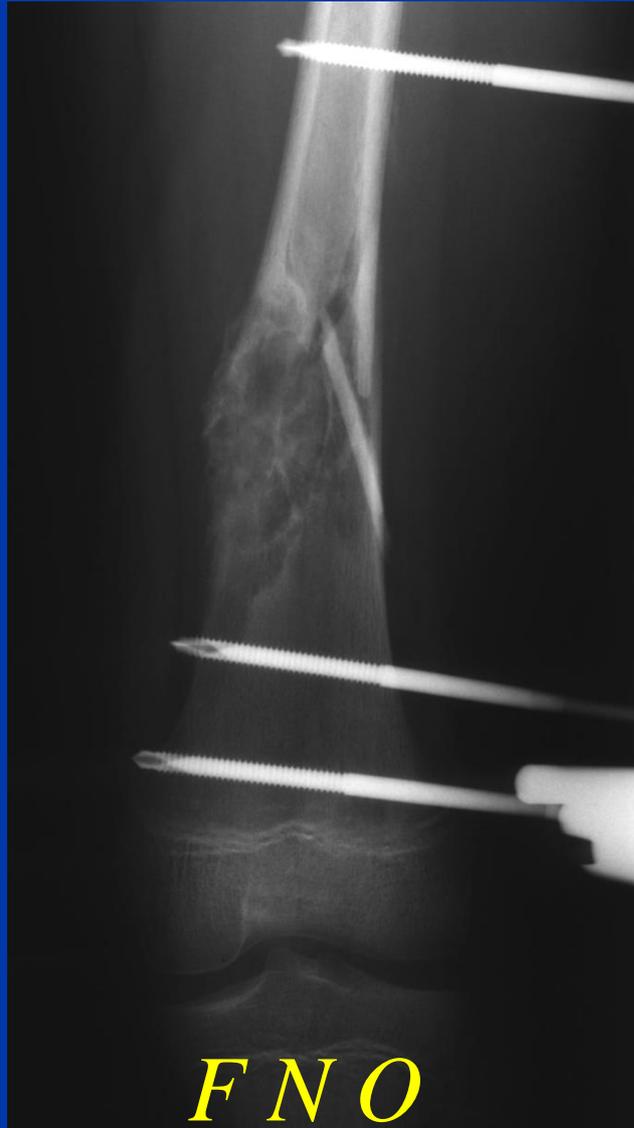
**CT SCAN
non
dirimente**



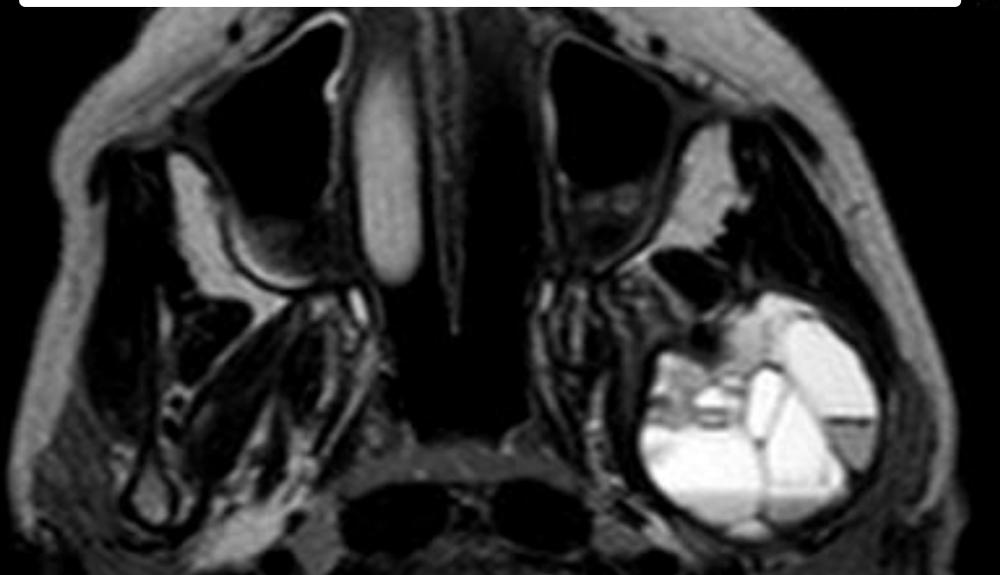
Condroblastoma epifisario



MRI ingannevole



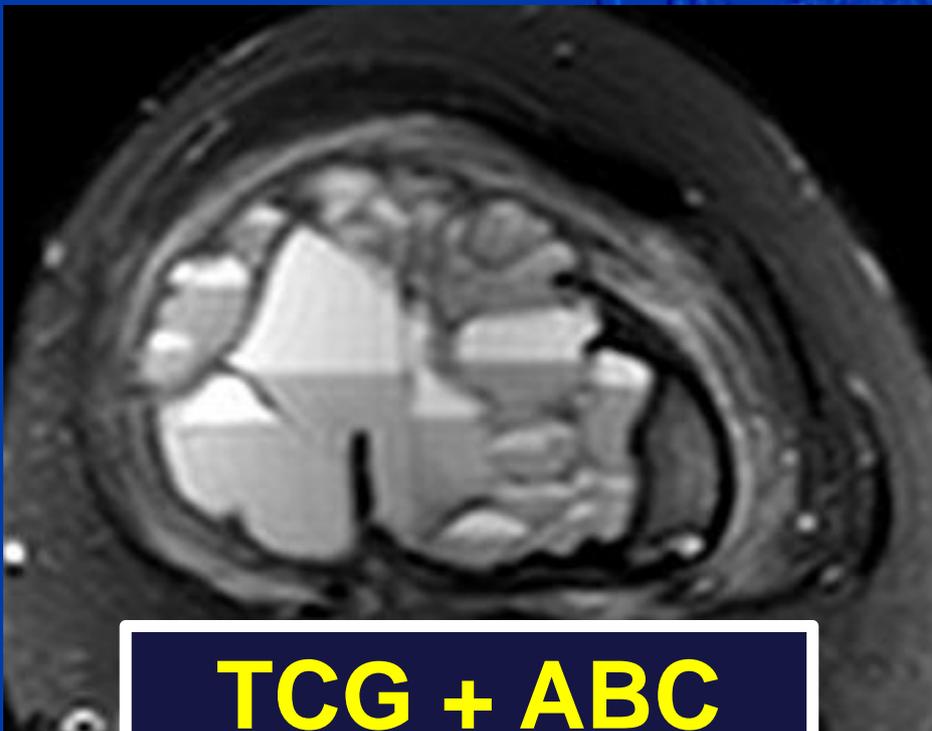
ABC



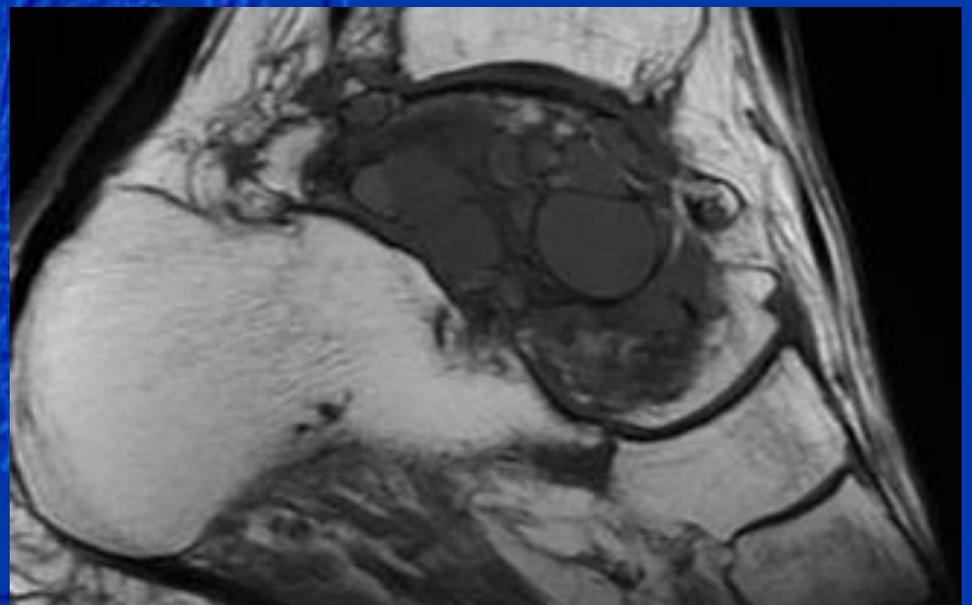
FNO + ABC



TCG + ABC



OSTEOSARCOMA



Errori in Ortopedia Oncologica



**Tutti gli esami
combinati**



**non sempre
il risultato
è
veritiero**

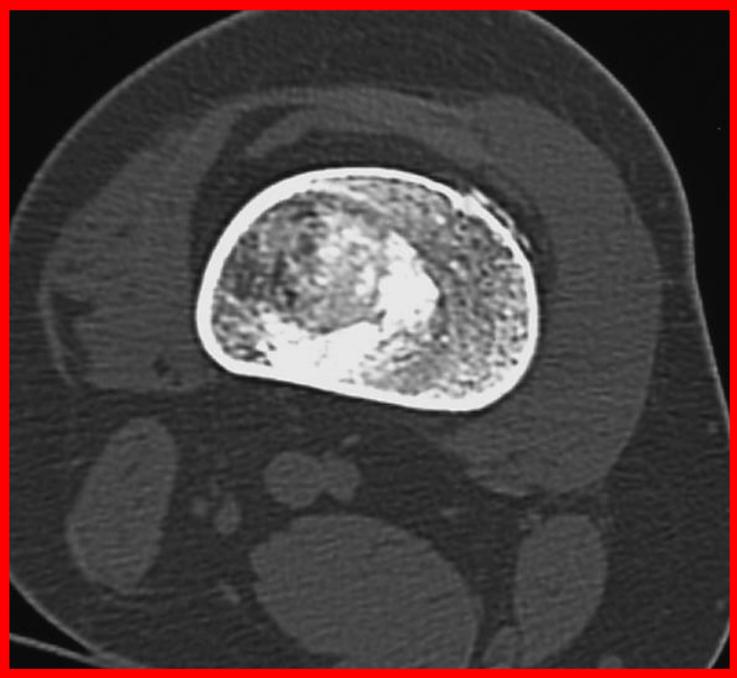
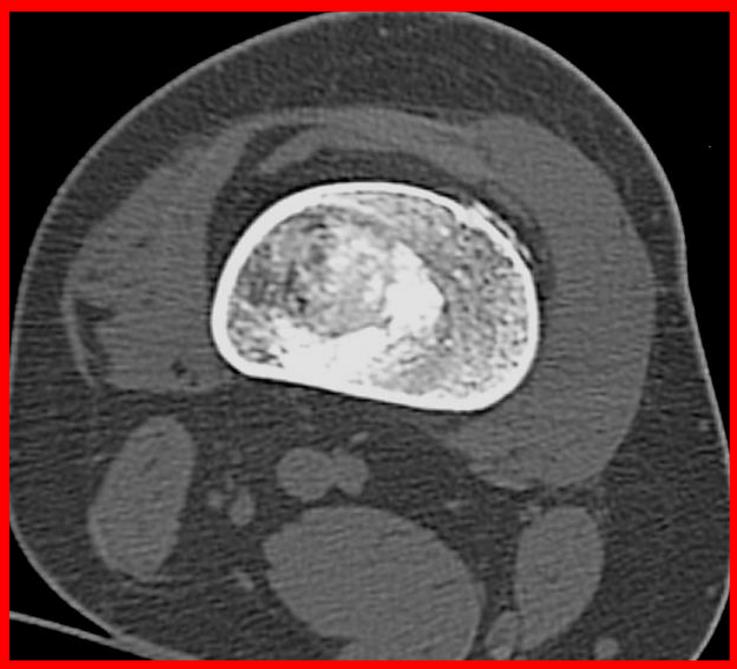


M. C. aa 15

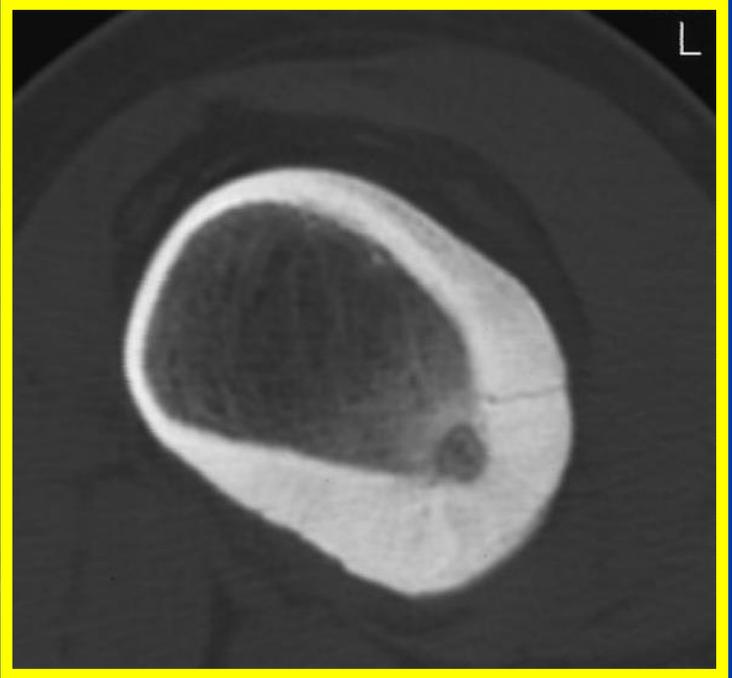


D. A. aa 18





OS basso grado



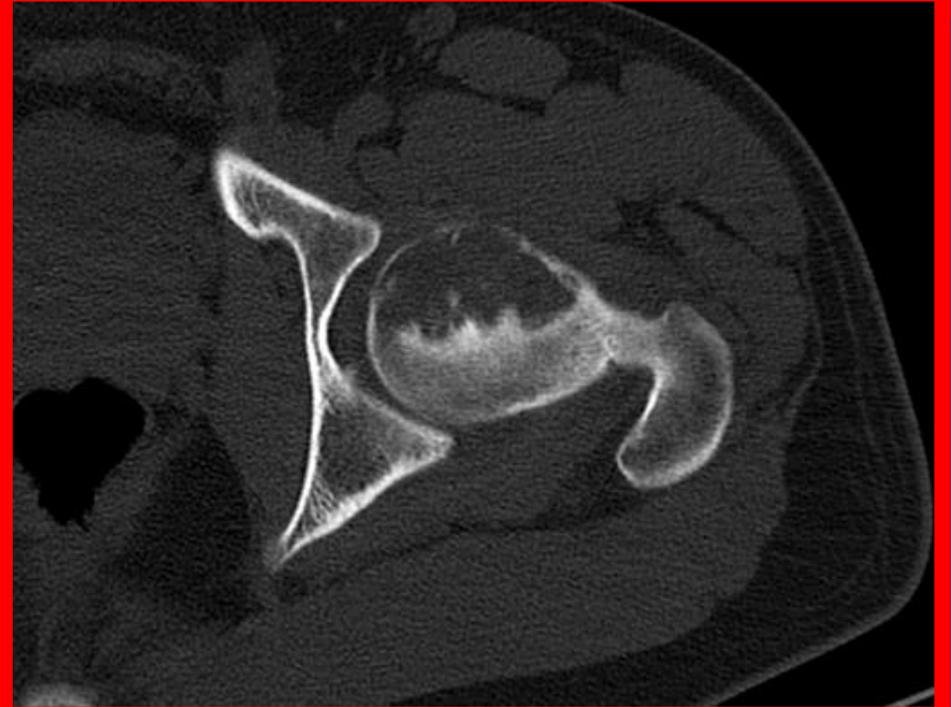
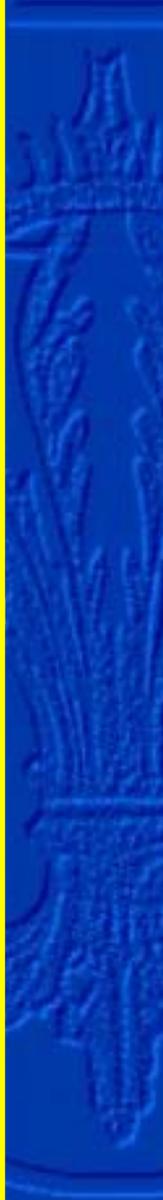
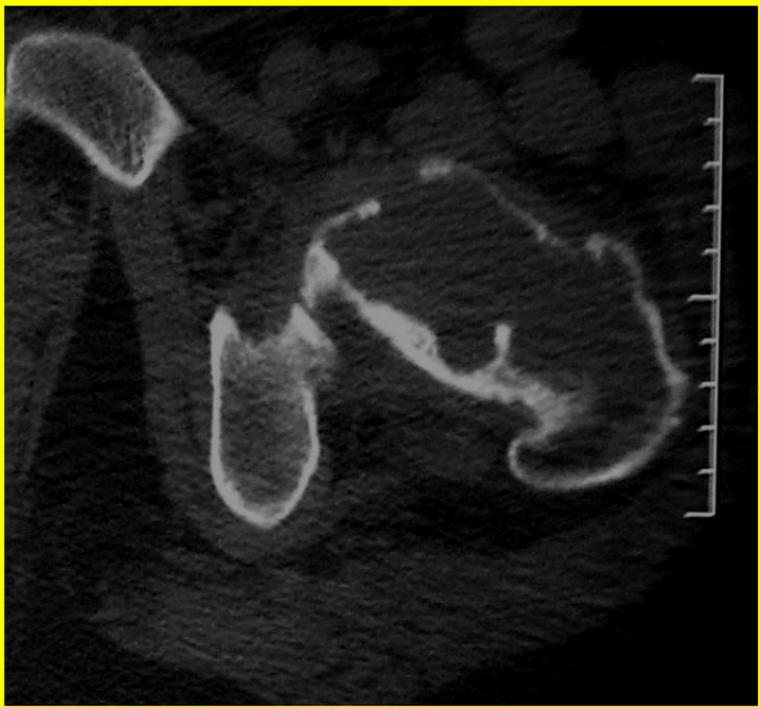
Osteoma Osteoide

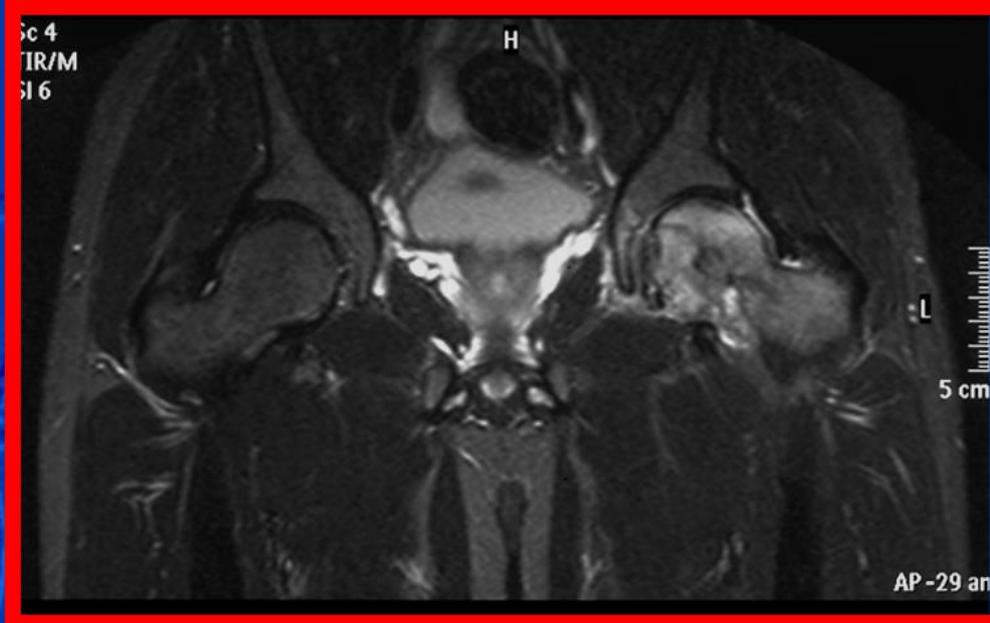


M. G. aa 44



A. G. aa 22





Evoluzione strana

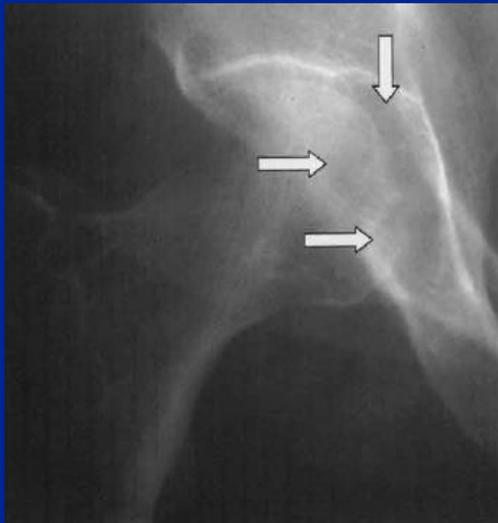


benigno



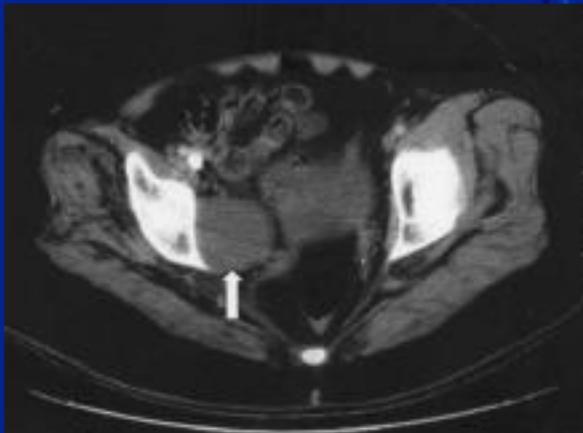
maligno

Duplice antitetico comportamento



55 yrs old
female

Synovial
chondromatosis



Chondromatosis
atypical ?



Synovial
chondrosarcoma

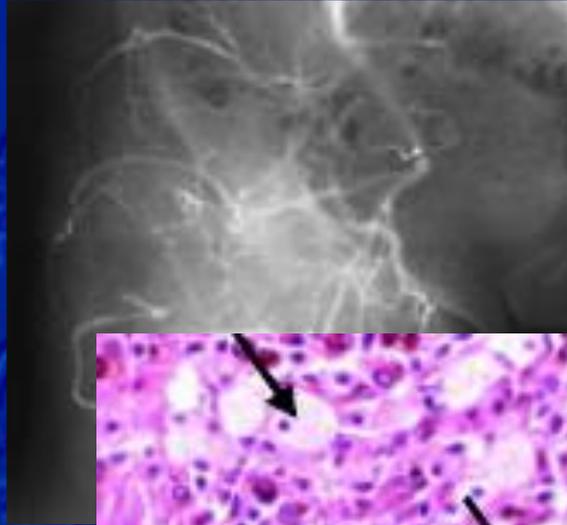


Pigmented villonodular synovitis of the hip mimicking soft-tissue sarcoma: a case report

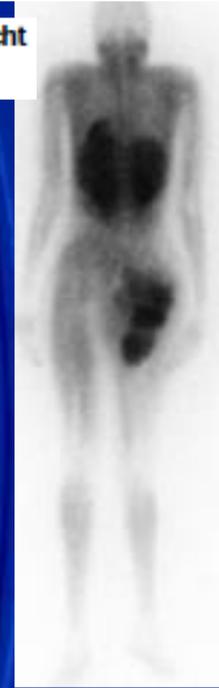
MKS Lee, PFM Choong, PJ Smith, GJ Powell, JL Slavin, SM Schlicht
St Vincent's Hospital, Fitzroy, Melbourne, Australia



erosioni ossee



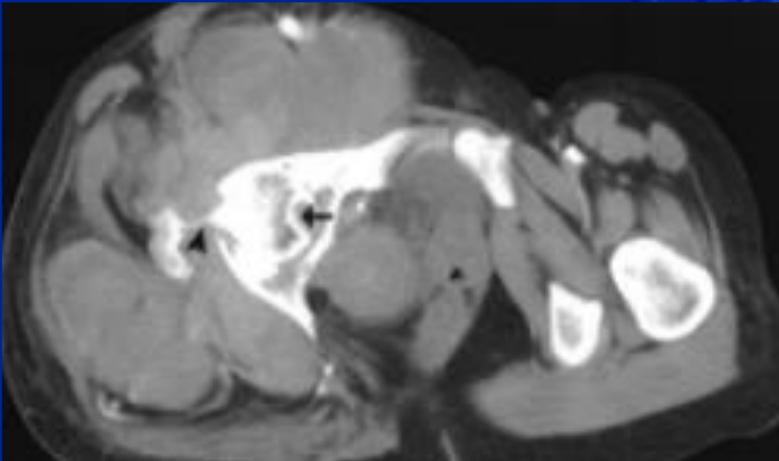
ne



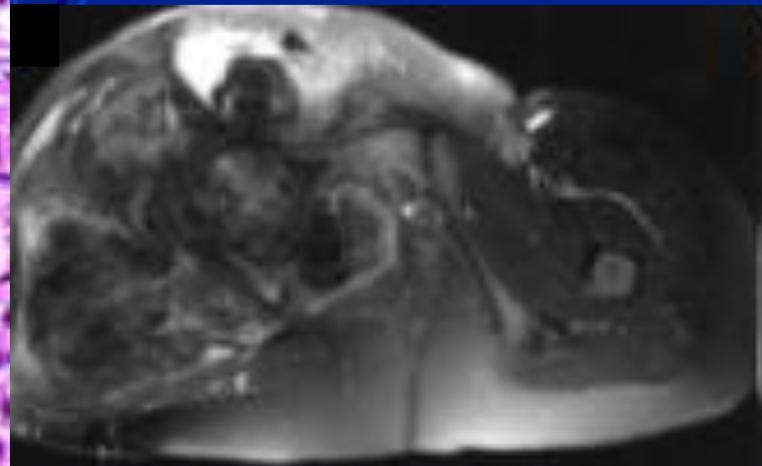
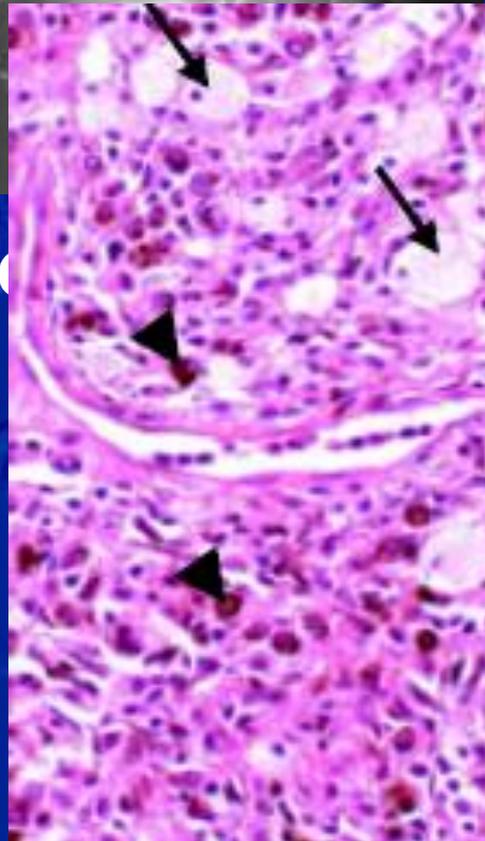
si



Pet
positivo



invasione parti molli



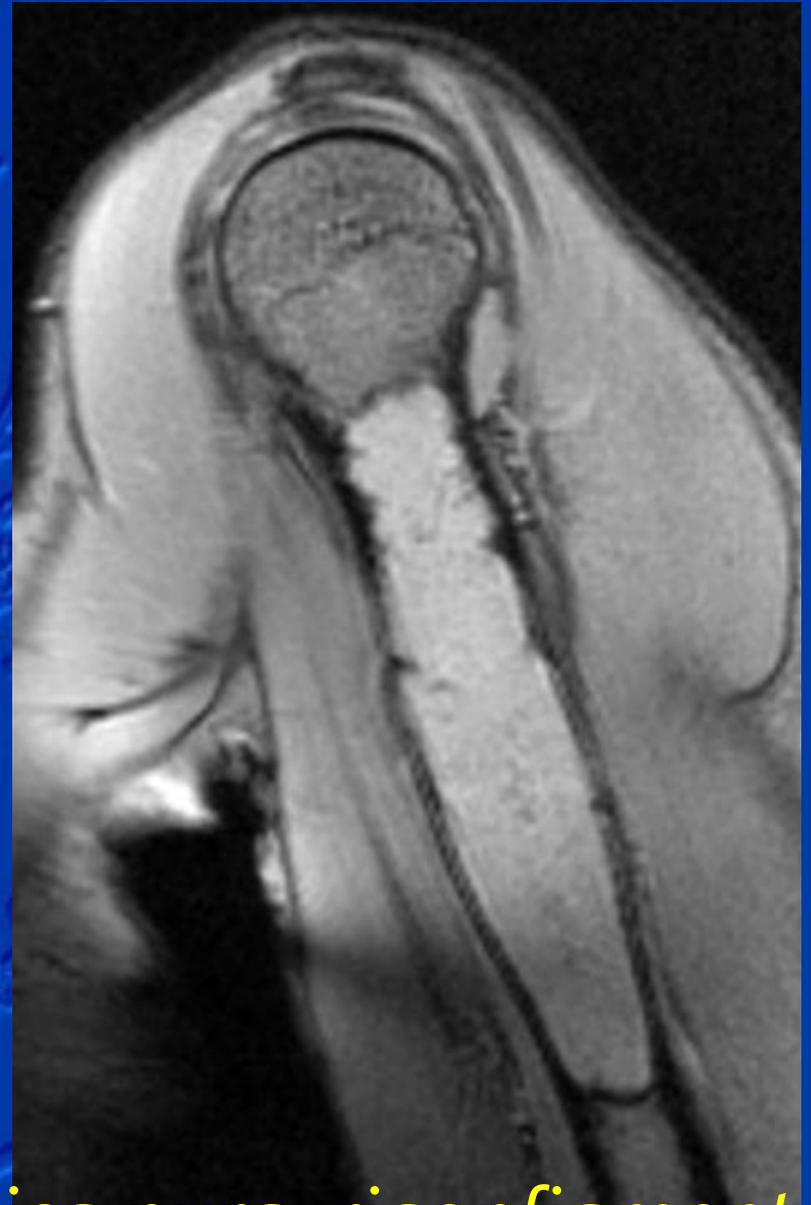
amputazione

Errori in Ortopedia Oncologica



**Una chirurgia
basata solo
su un imaging
ingannevole
può essere
deviante
e
pericolosa**

RX ,TAC, RNM ingannevole



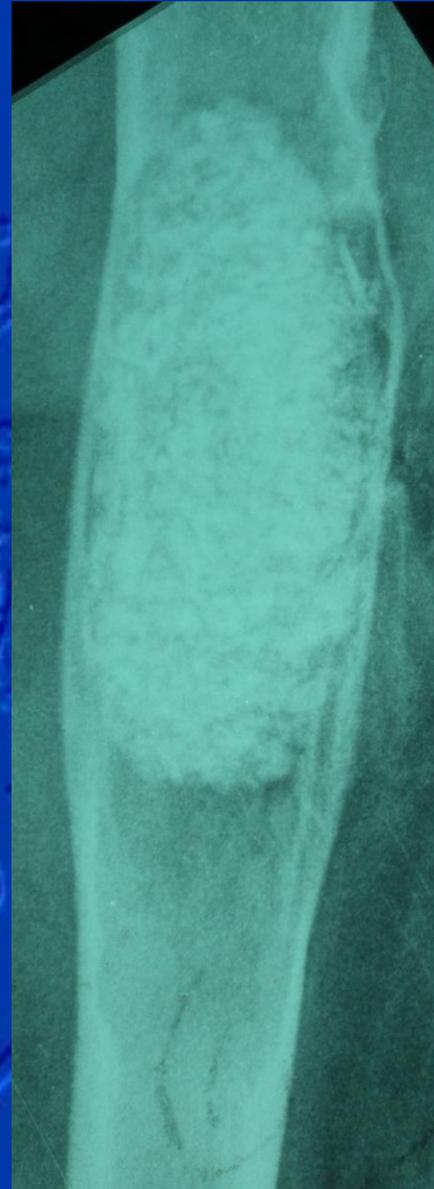
Maschio, 50 aa., lesione osteolitica pura ,rigonfiamento similaneurismatico della corticale

Contenuto liquido simil mucoide..

curettage

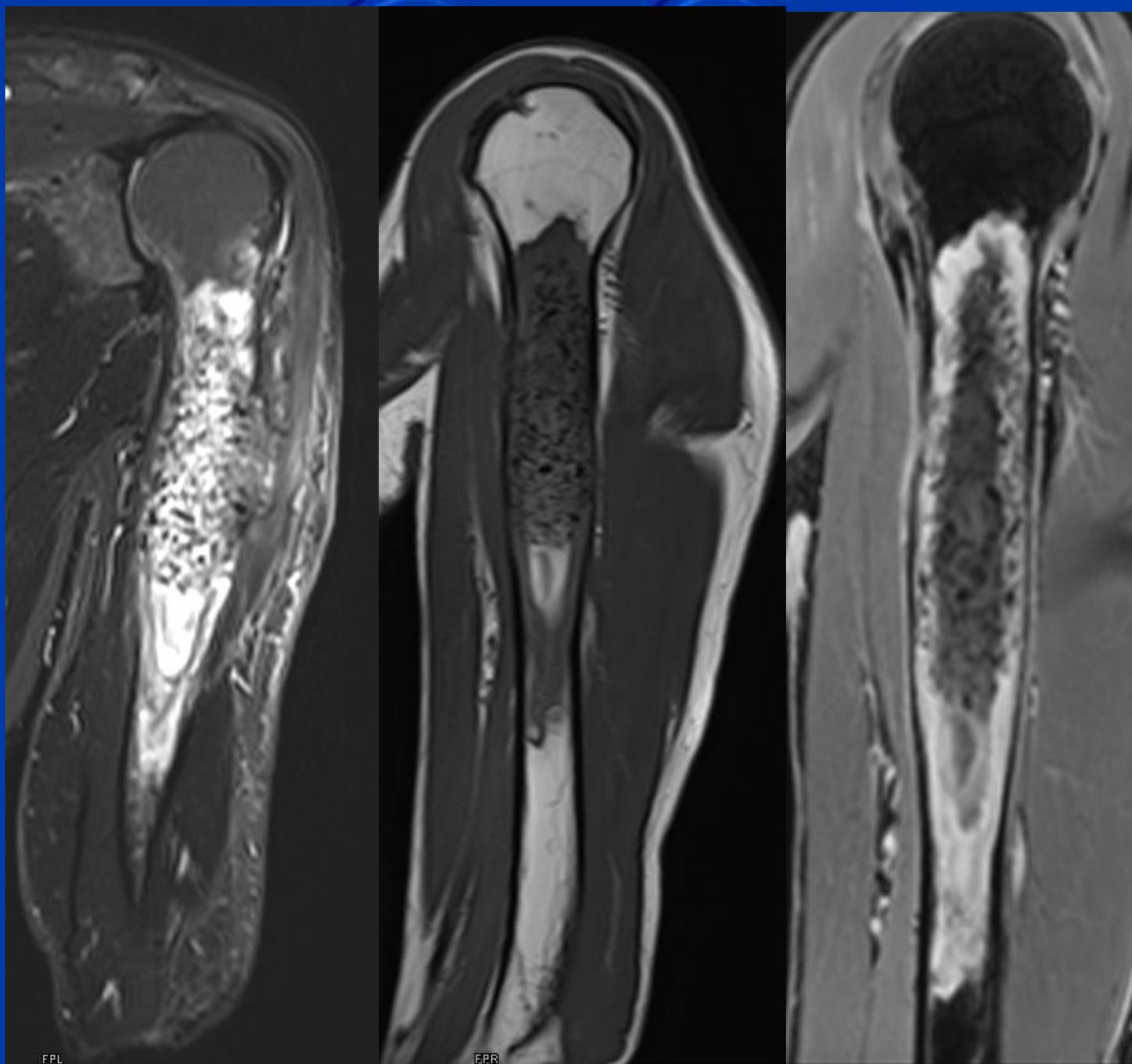


&
grafting



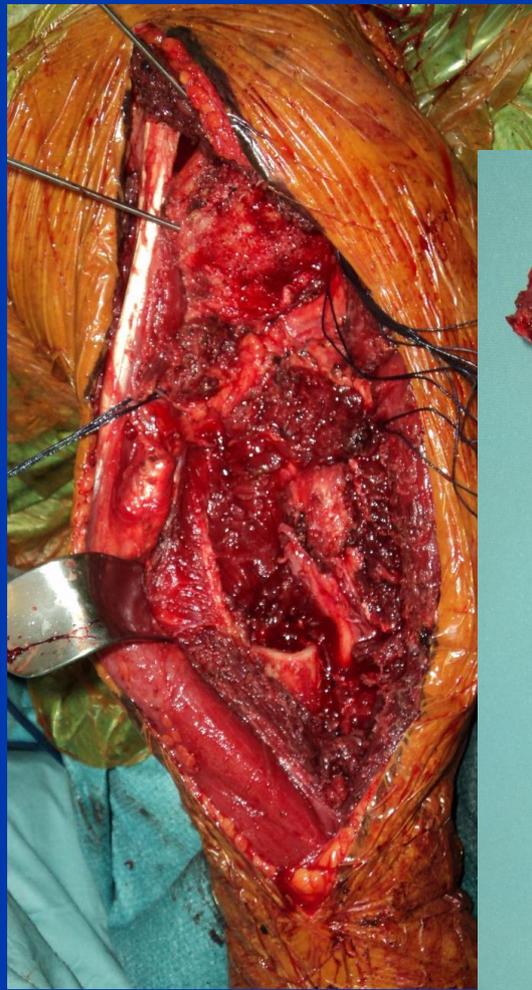
.....chirurgo ingannato

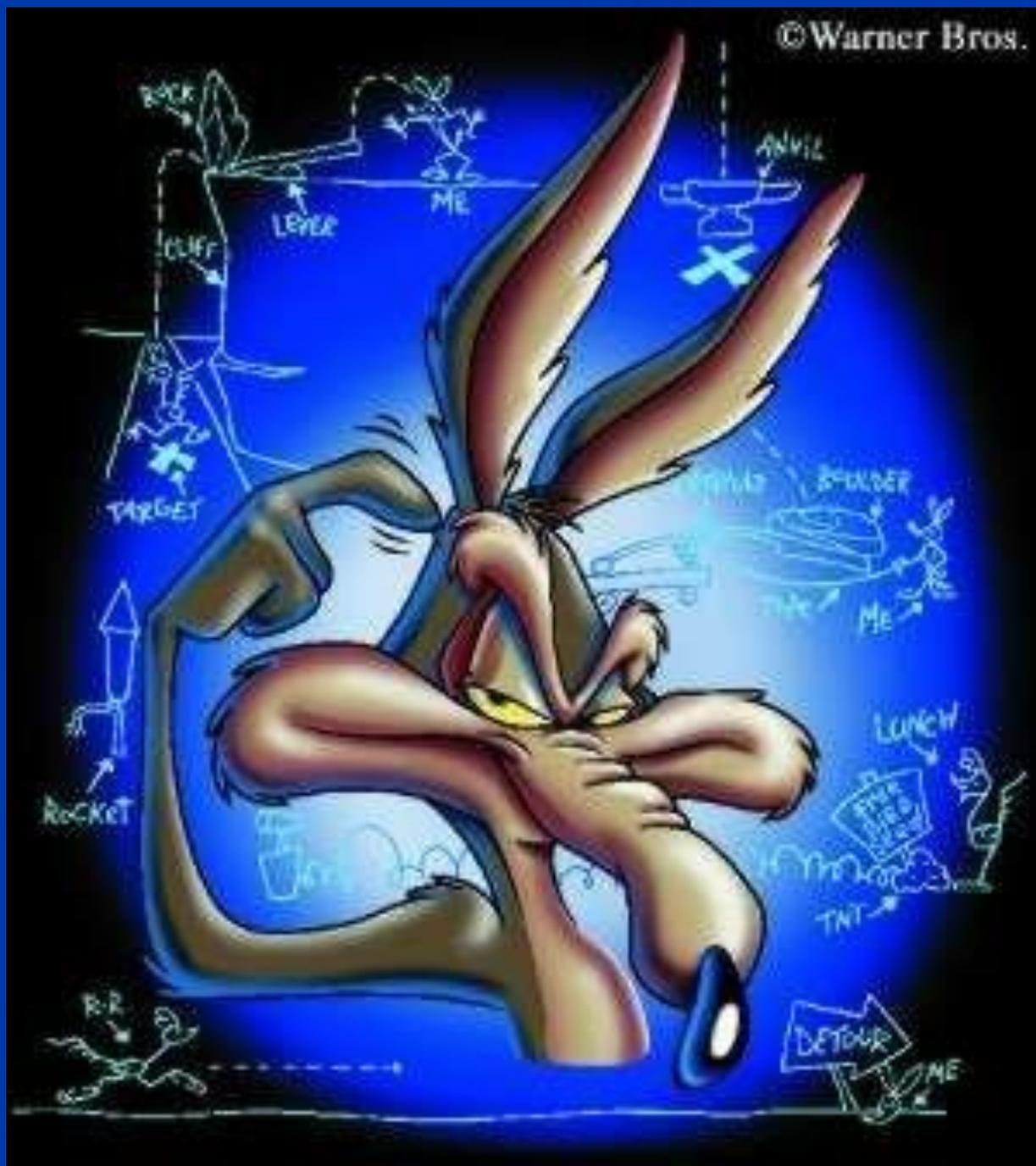
GRADE II CONDROSARCOMA



Resezione intercalare

VFG+Allograft





Per evitare
ogni dubbio



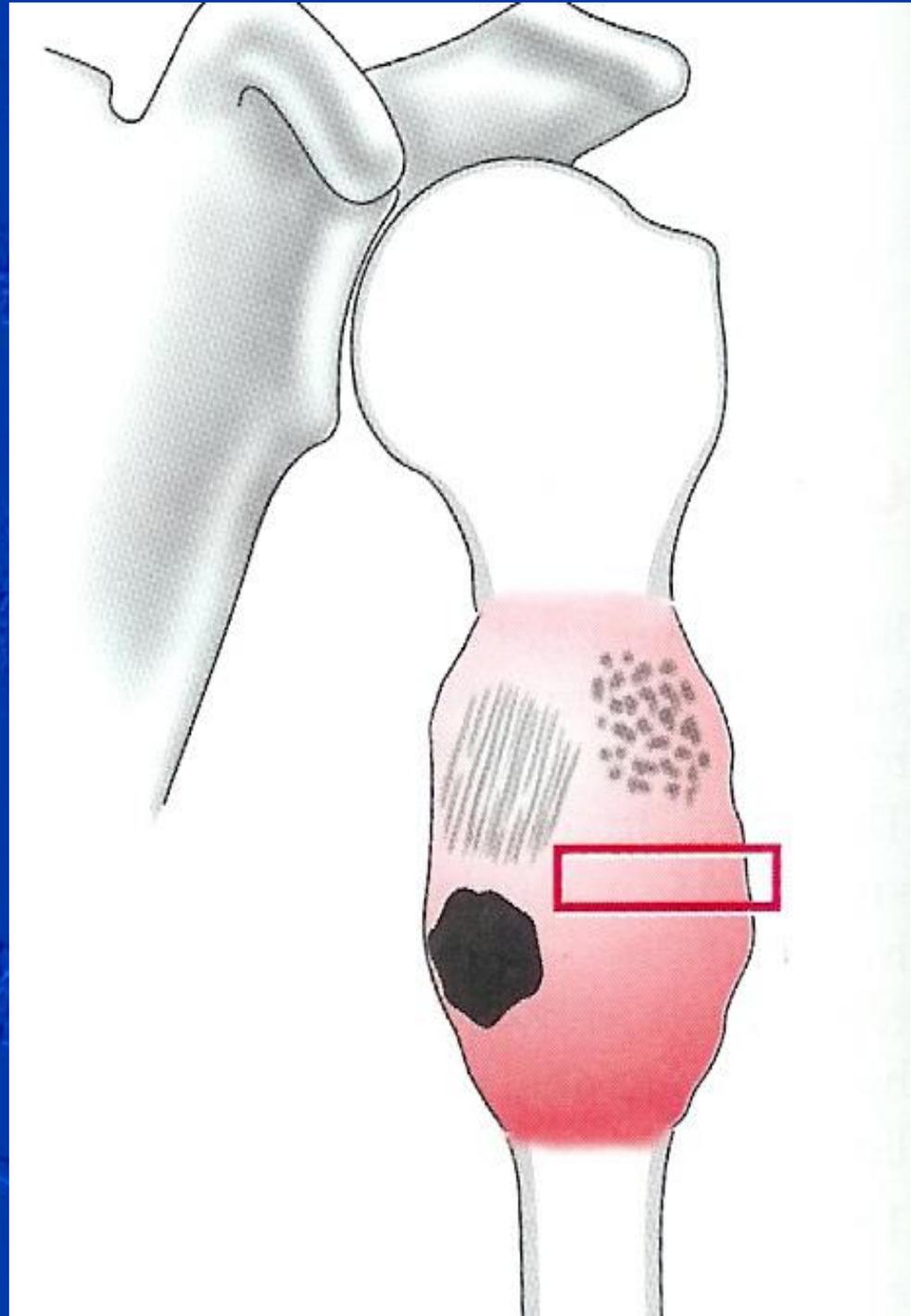
biopsia

Quando e come eseguire la biopsia ?



Al termine dello studio preoperatorio

***Evita
aree
calcificate,
necrotiche,
colliquate
o emorragiche***

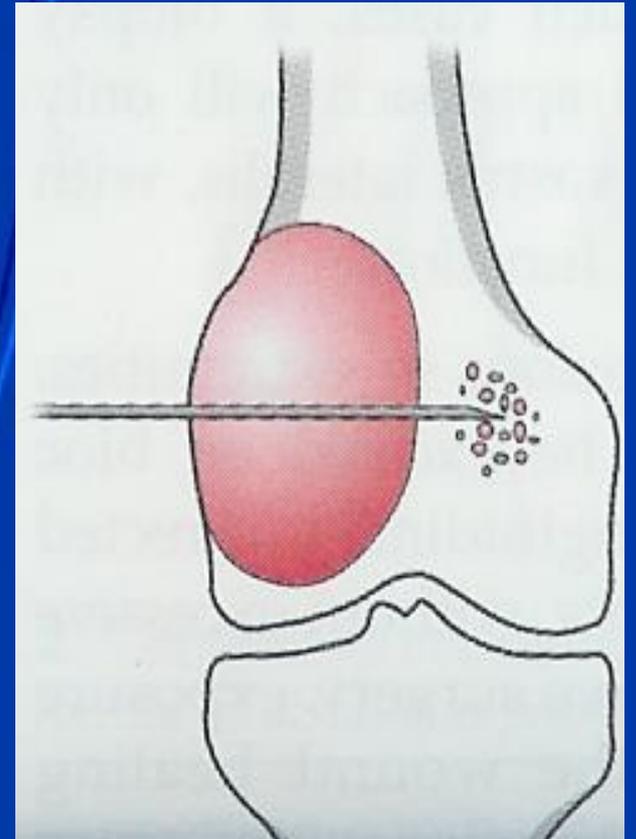


Biopsia in Oncologia Ortopedica

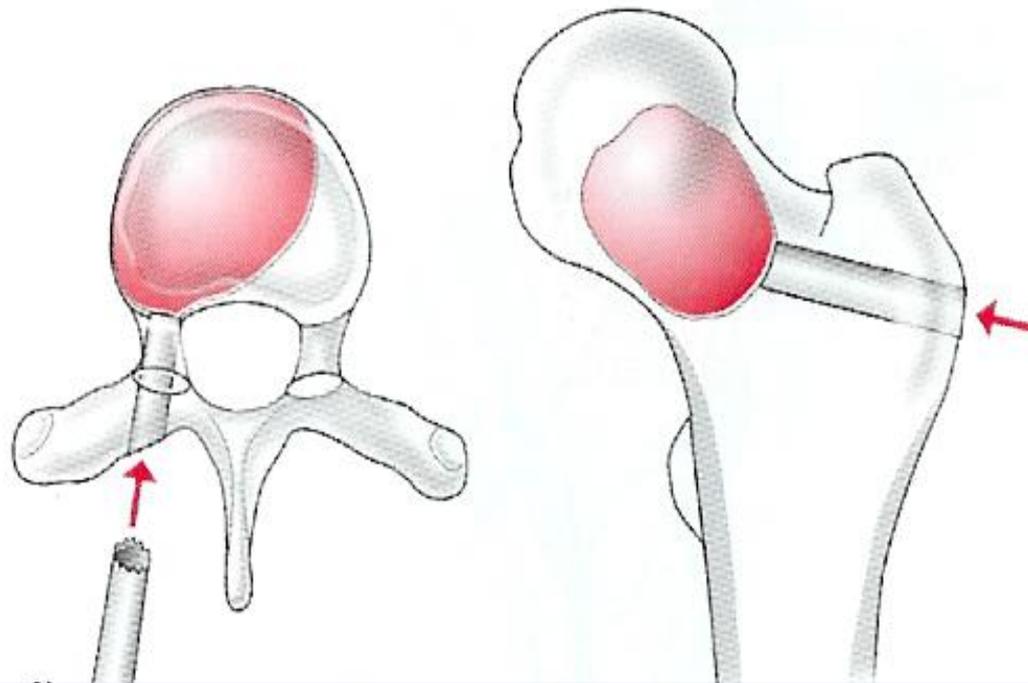
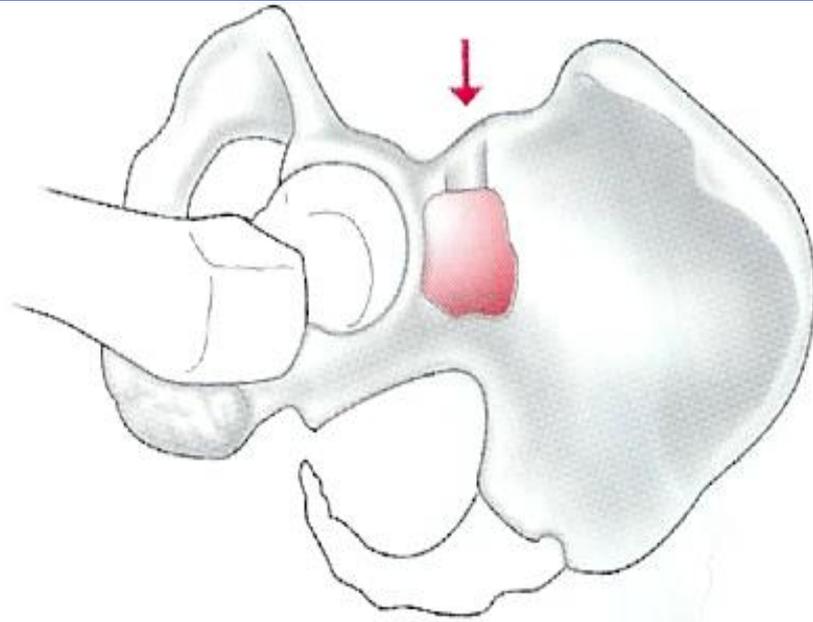
Semplice conferma diagnostica radiografica



agobiopsia





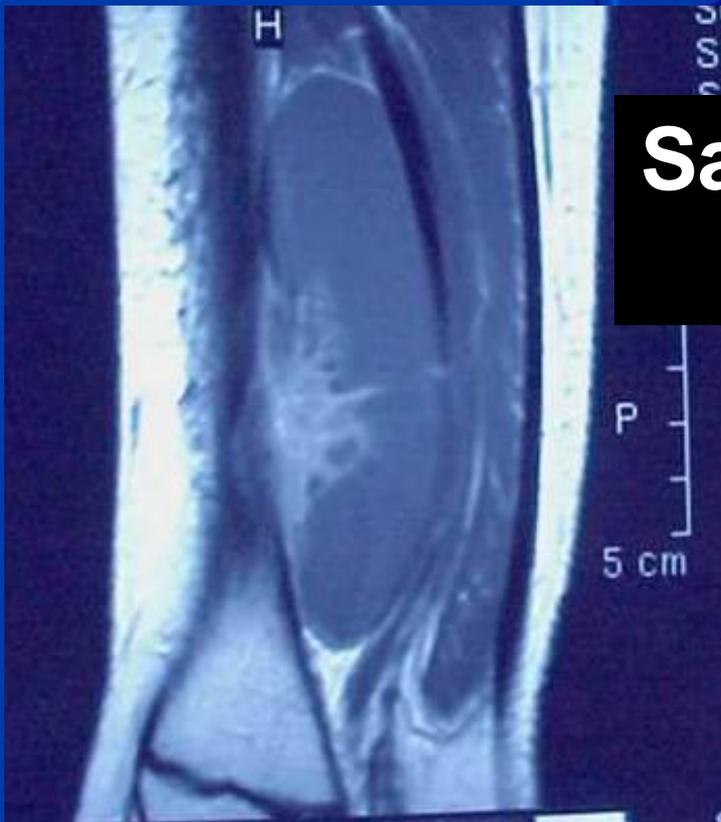


**Attraverso
tunnel
ossei**

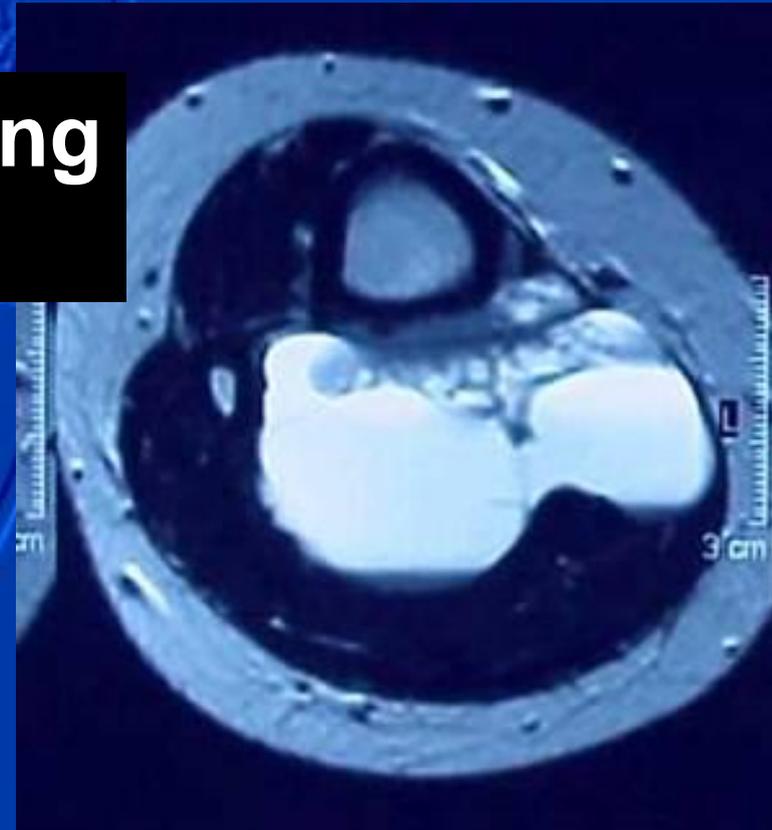
Biopsia in Oncologia Ortopedica

Chiarire lesioni difficili o atipiche

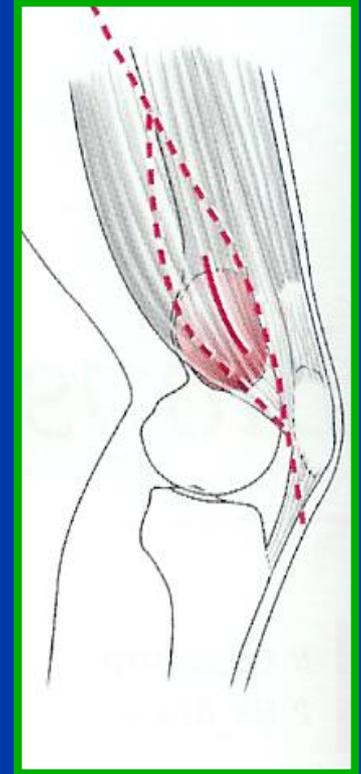
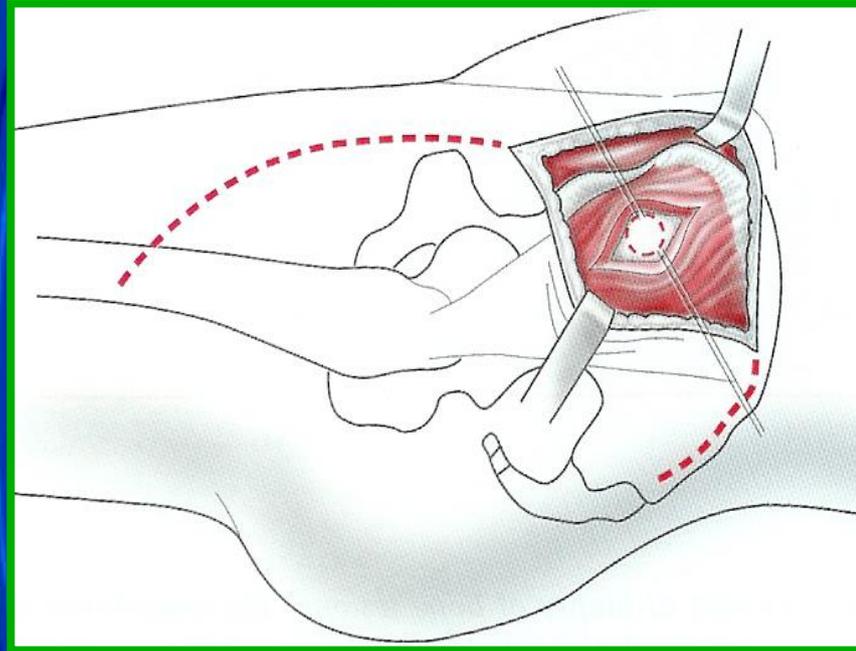
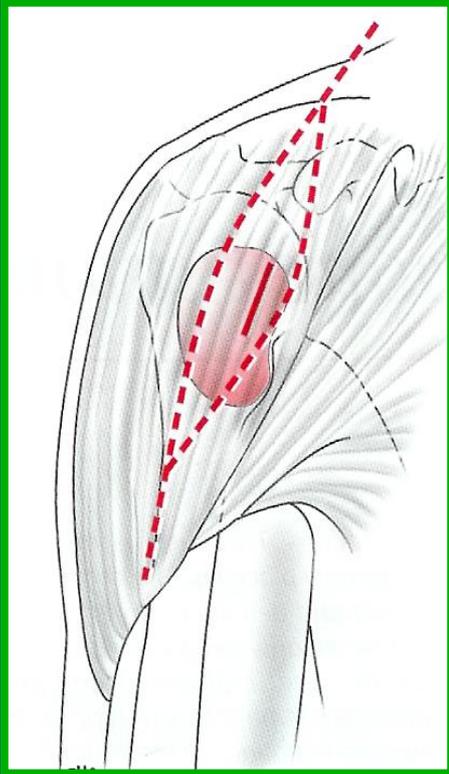
→ **Biopsia incisionale**



**Sarcoma di Ewing
Periosteale**



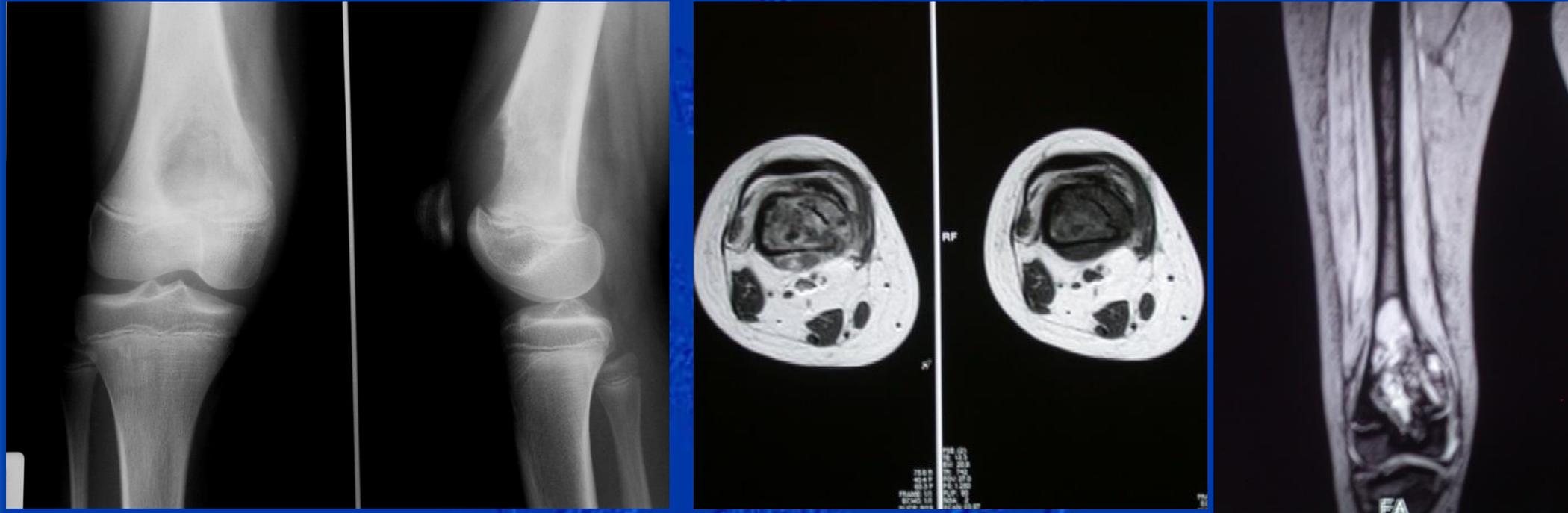
Come fare la biopsia ?



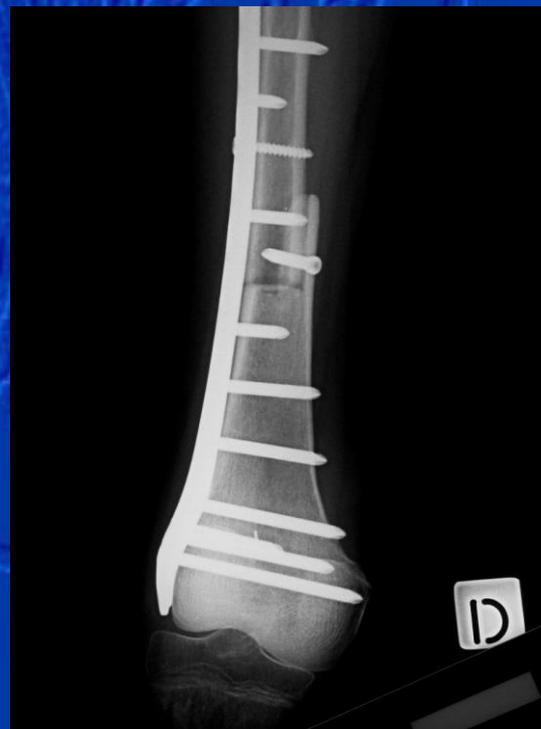
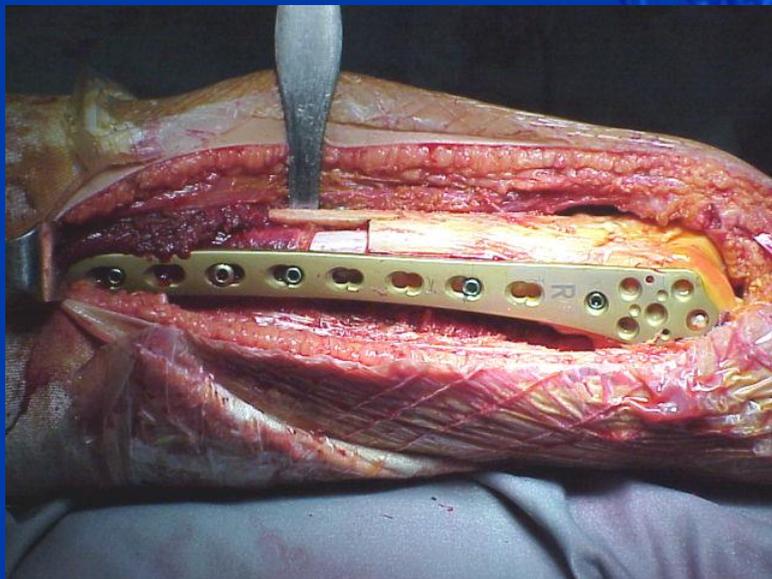
**Stessa via di accesso che sarà utilizzata
nell'intervento definitivo**

(stesso chirurgo)

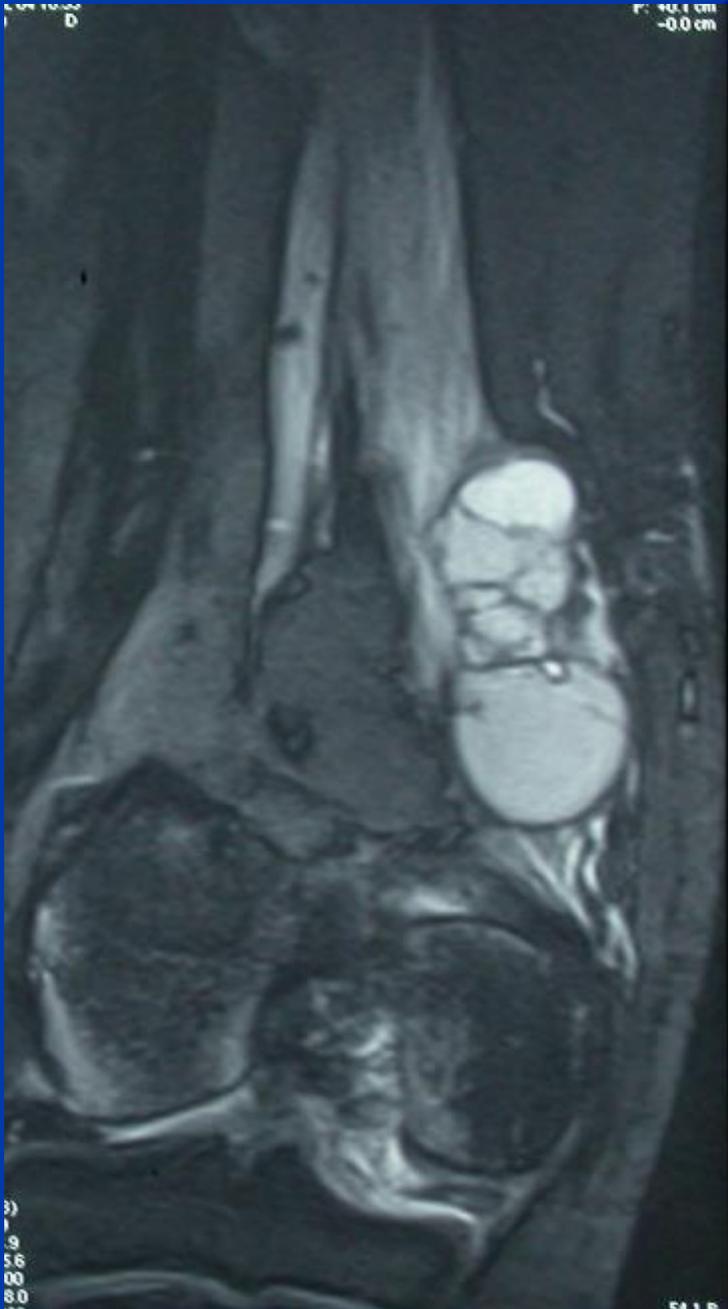
Errori nella biopsia



Errori nella biopsia



Errori nella biopsia



**Neoformazione
ipervascolarizzata
vasto mediale**

Errori nella biopsia



**Recidiva locale
su tramite bioptico
di
O.S. Teleangectasico**

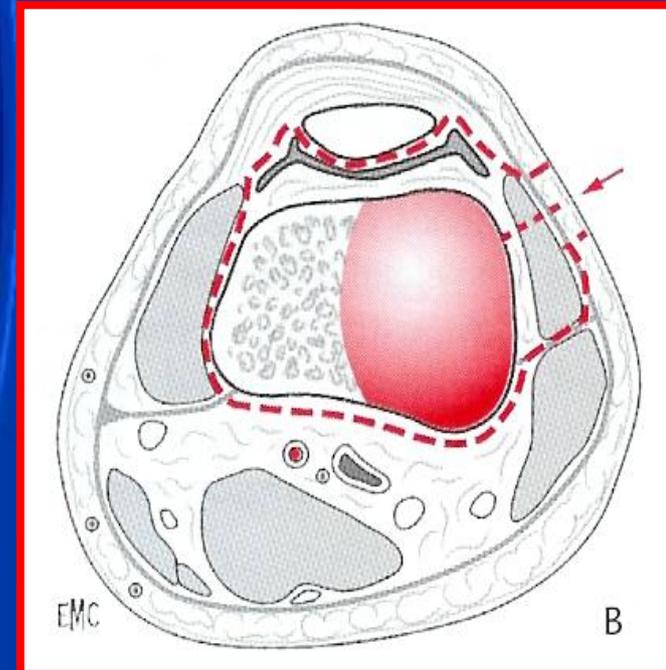
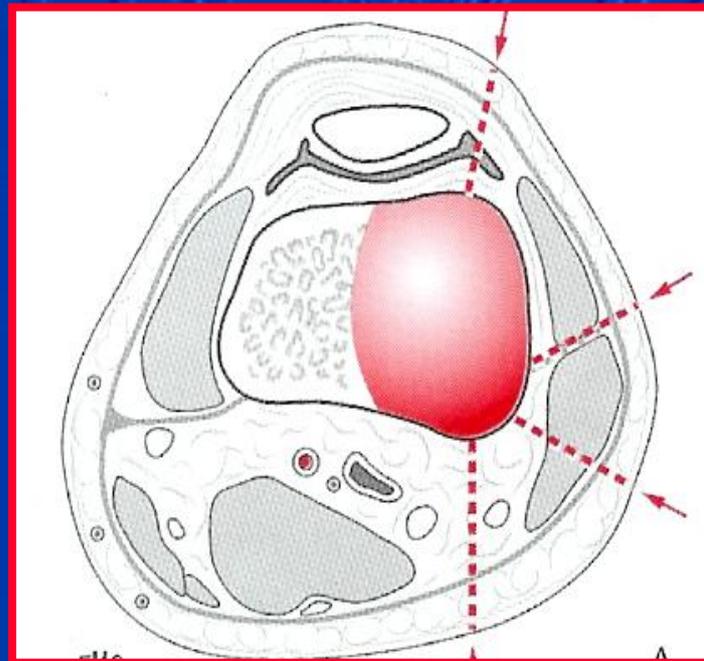
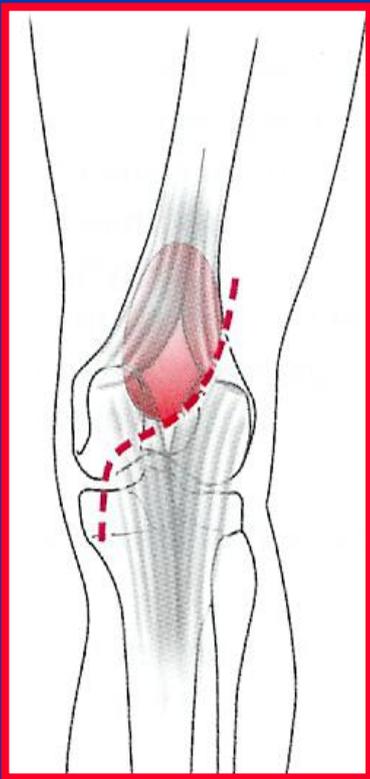


**Non violare le aree extracompartimentali
o contaminare il tronco neuro-vascolare**

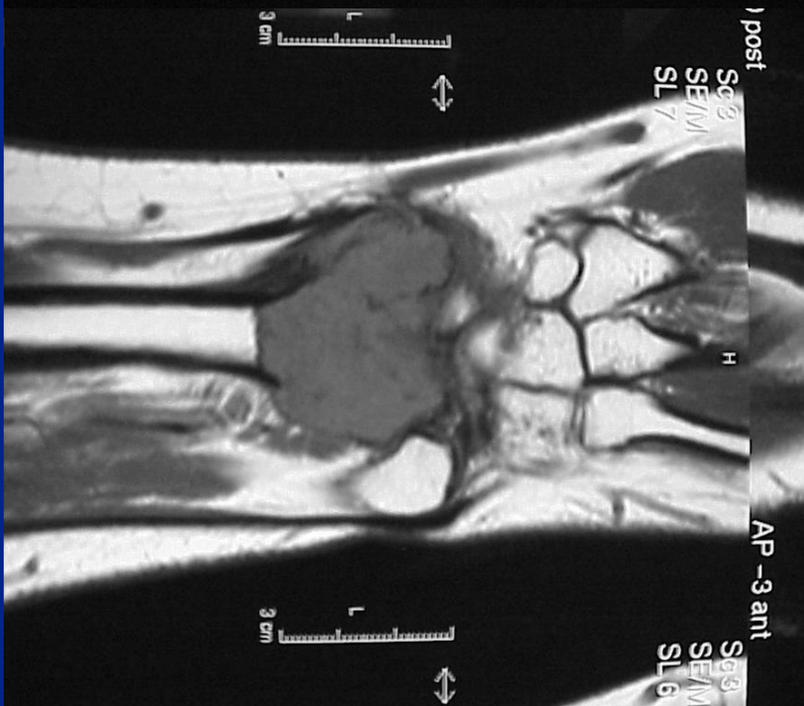
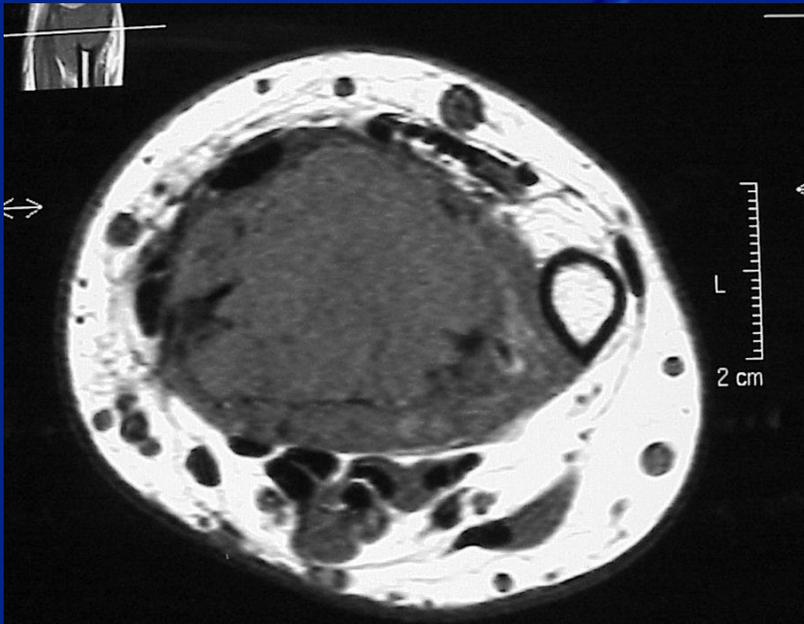
i piani intermuscolari

la cavità articolare

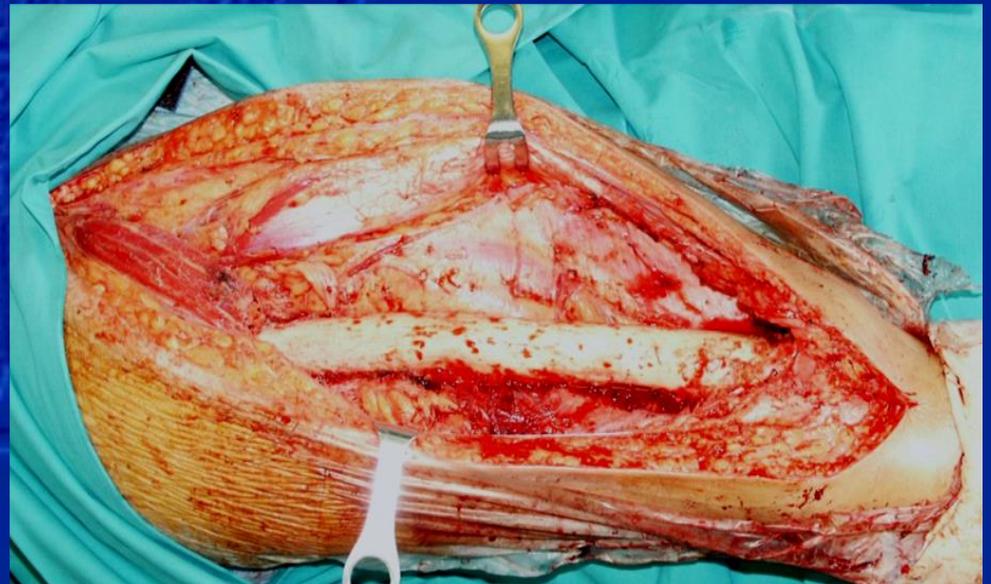
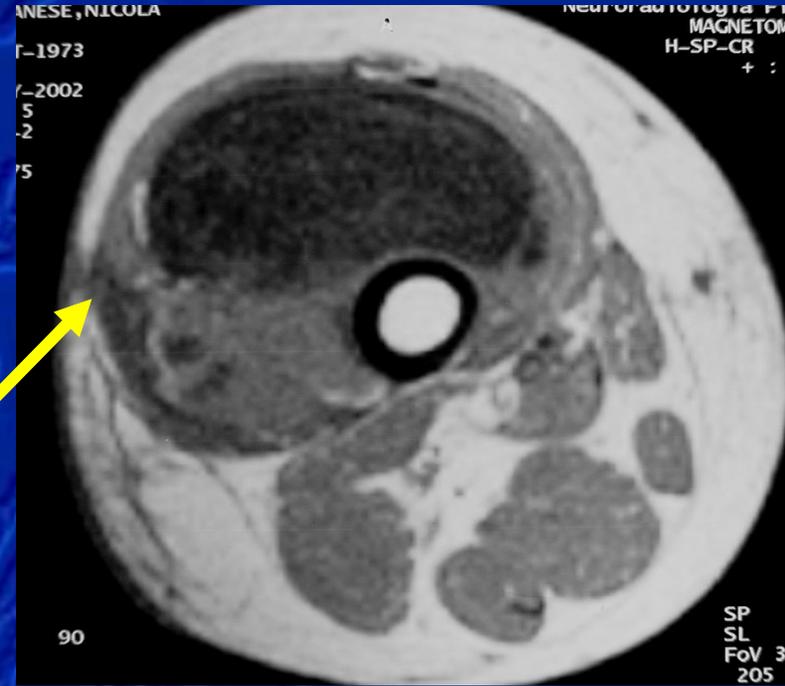
gli spazi peridurali



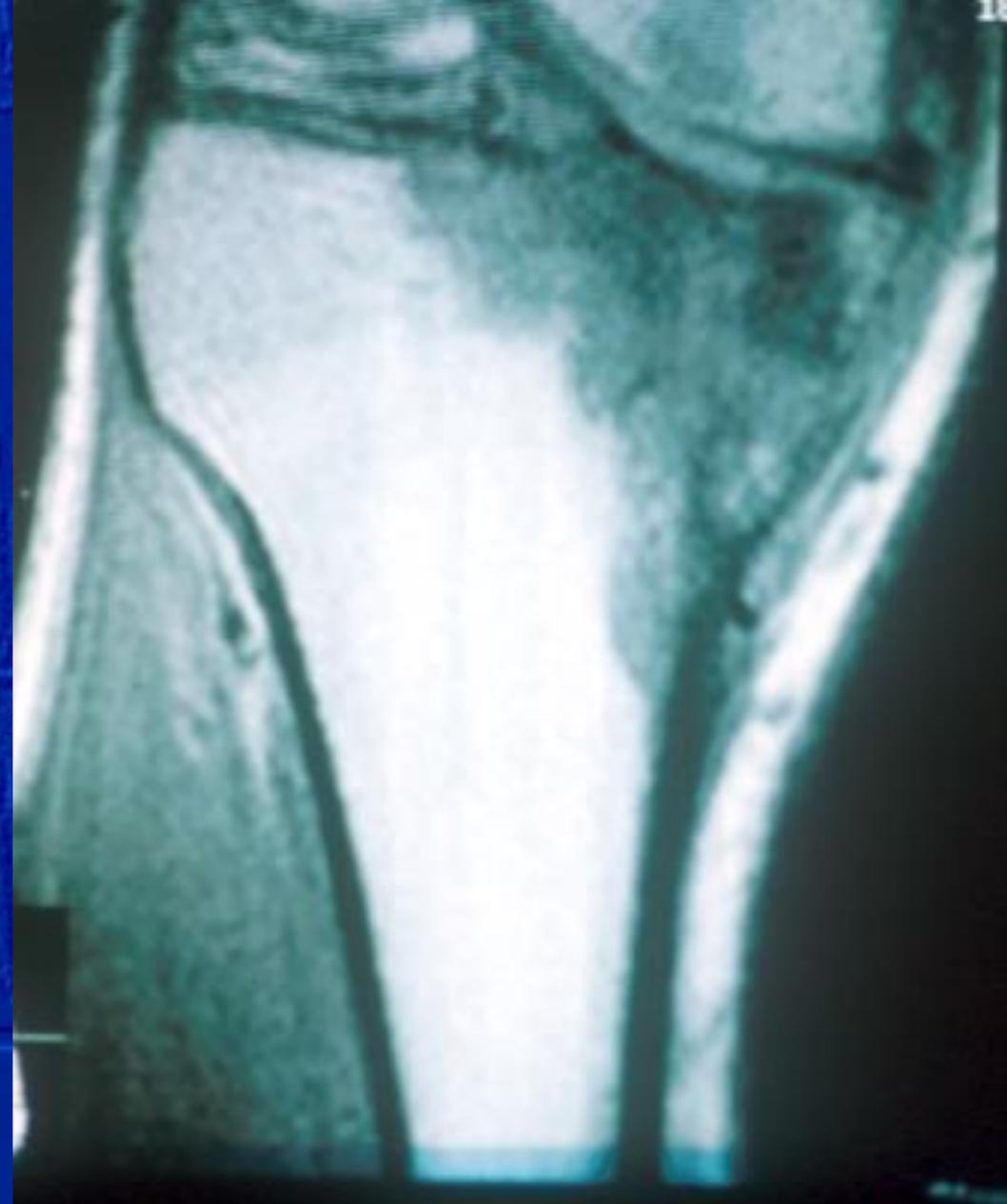
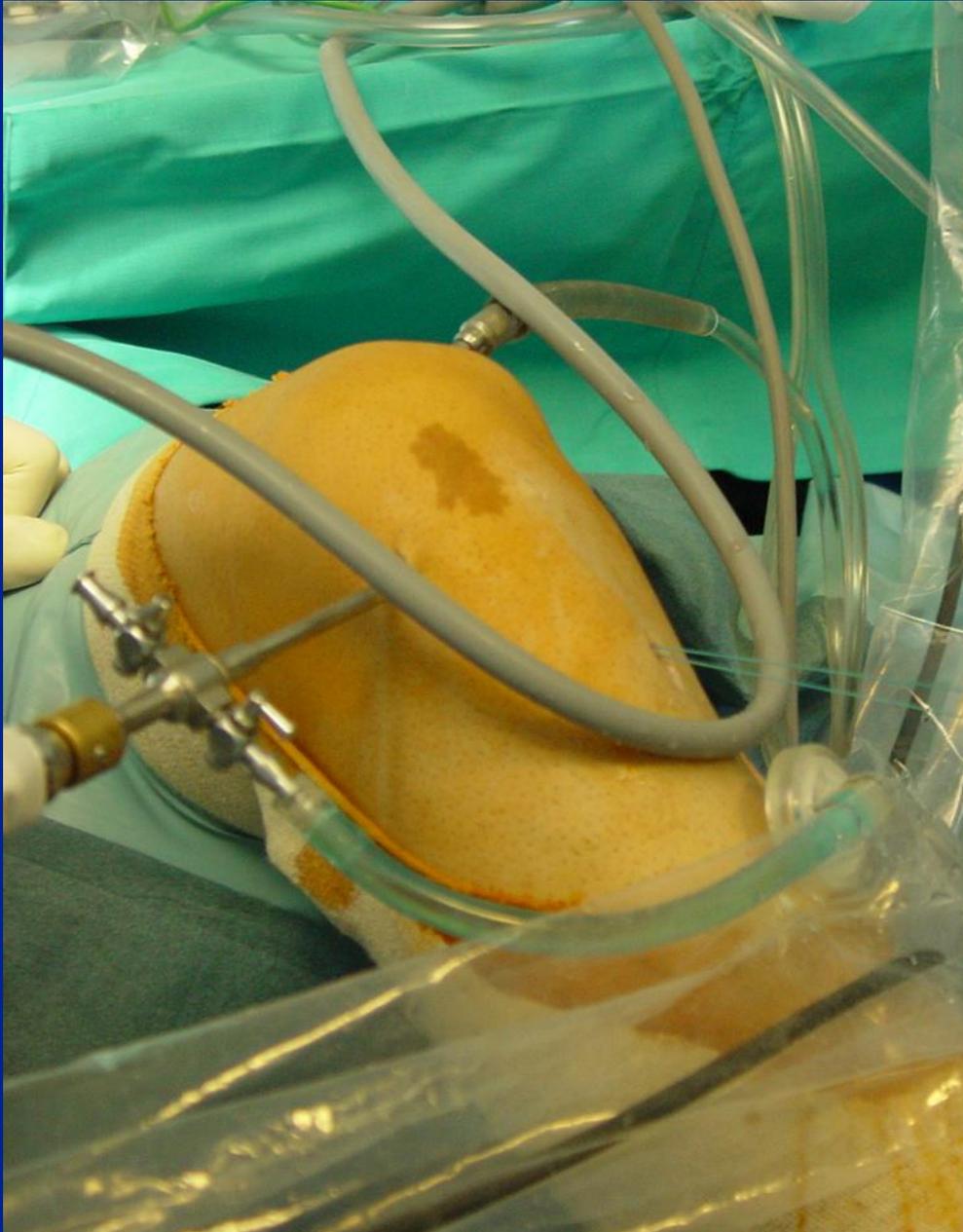
Errori nella biopsia

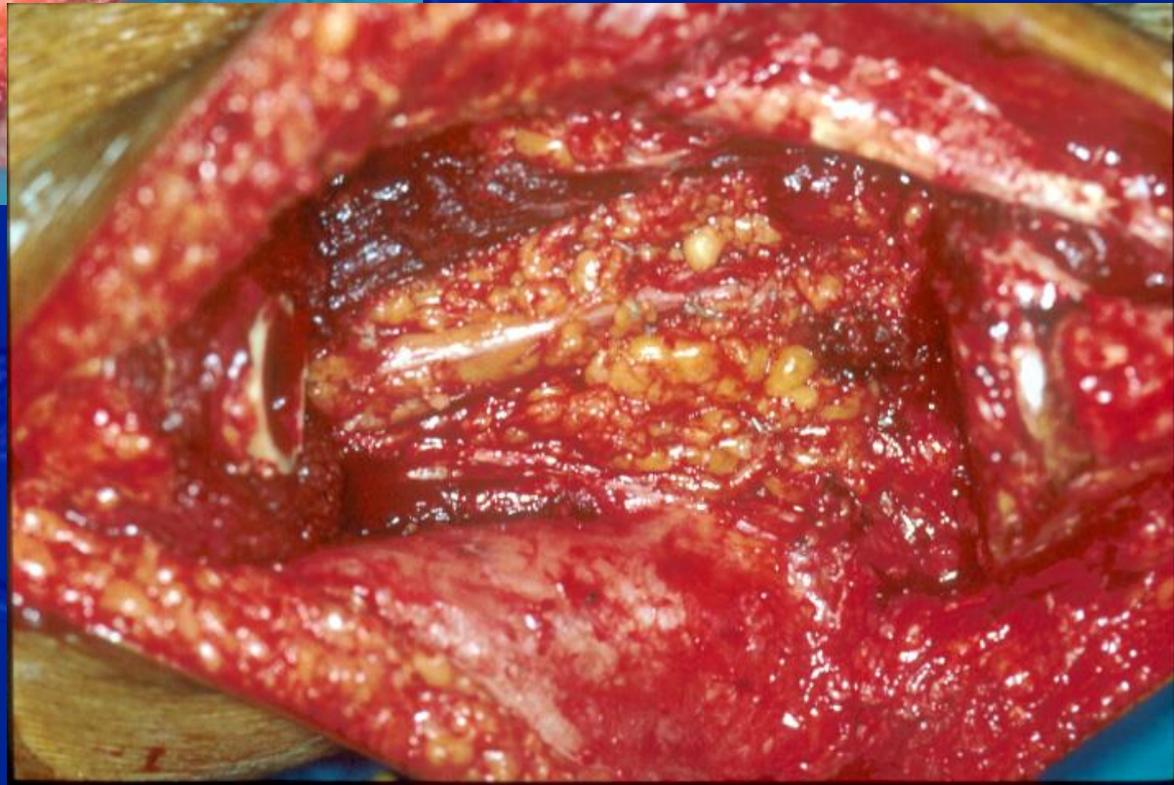
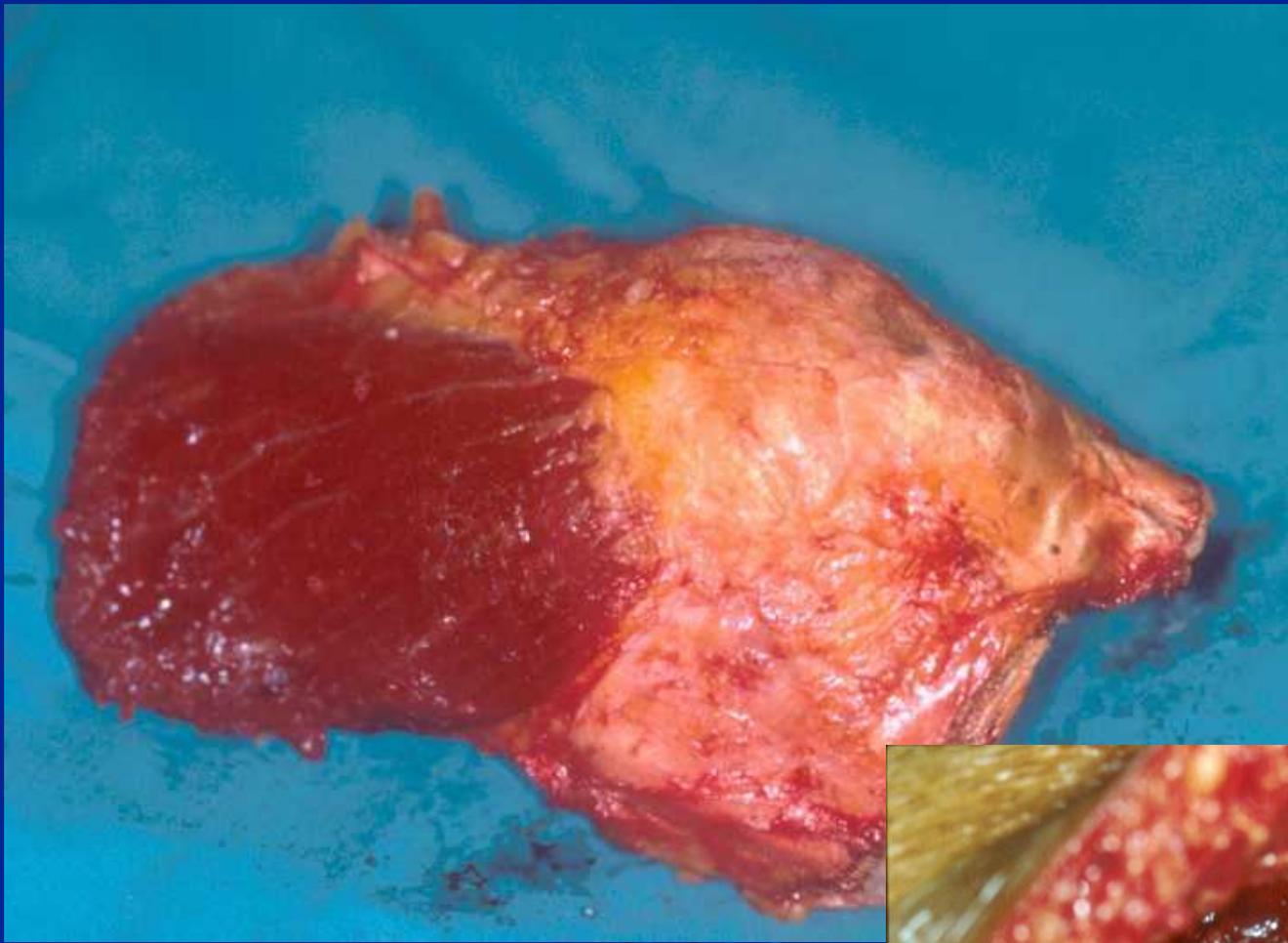


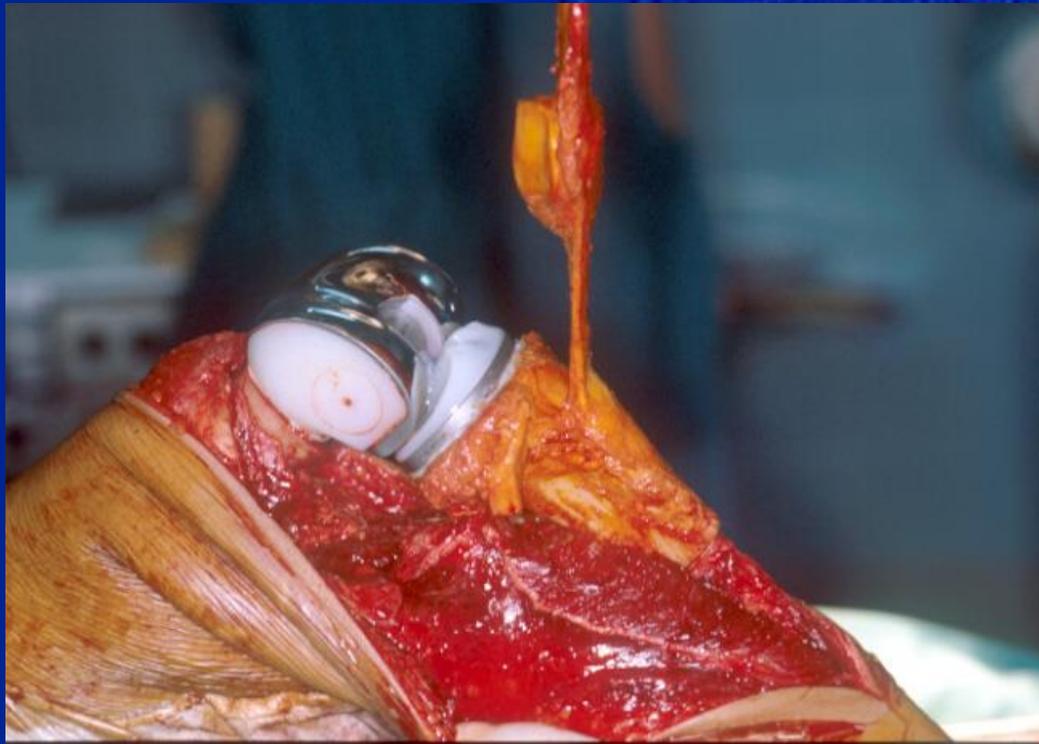
Errori nella biopsia



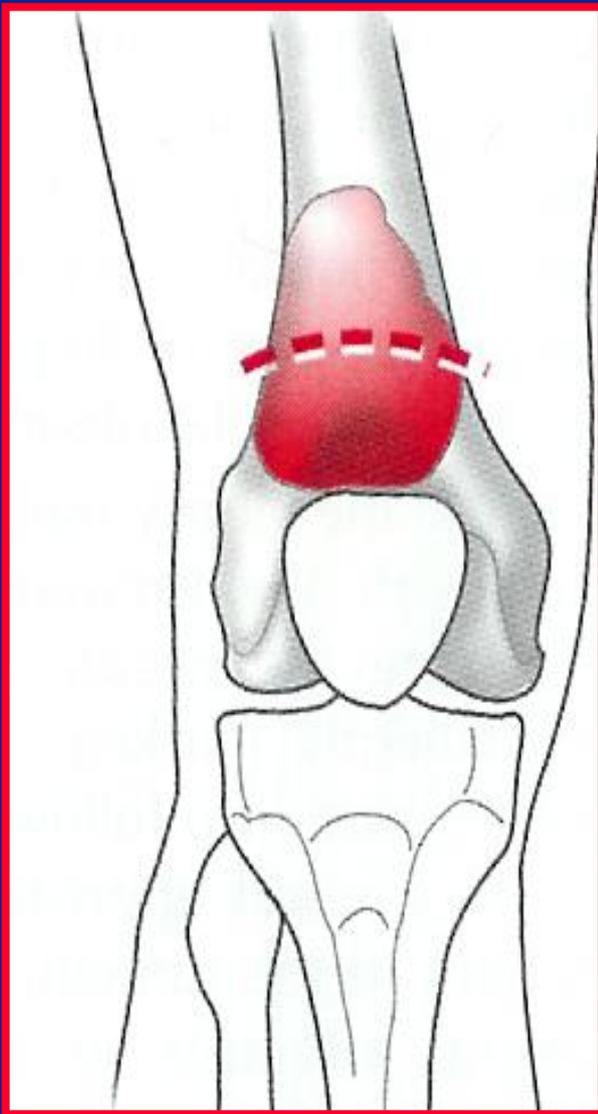
Errori nella biopsia



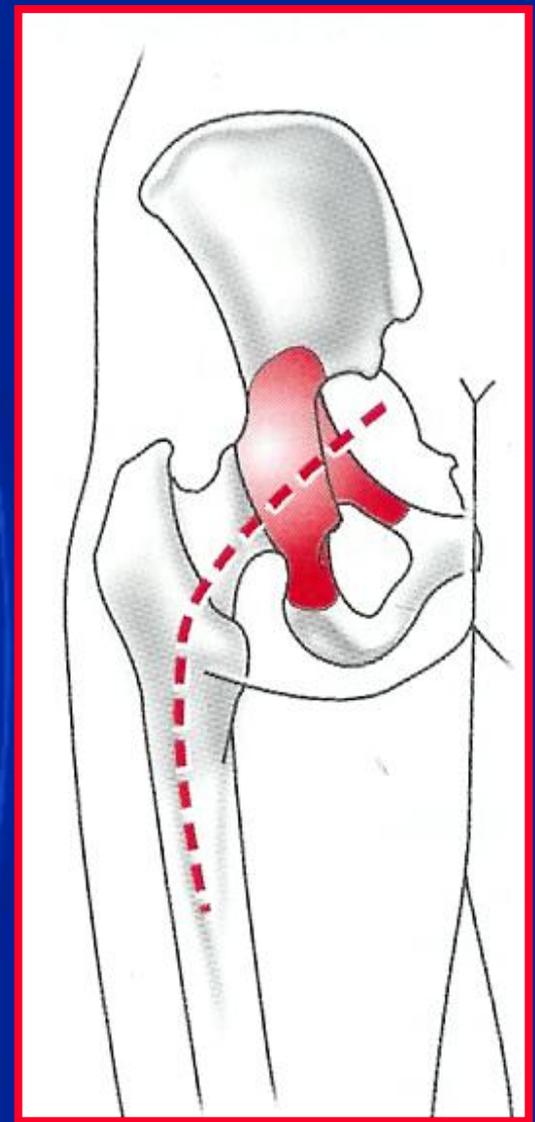








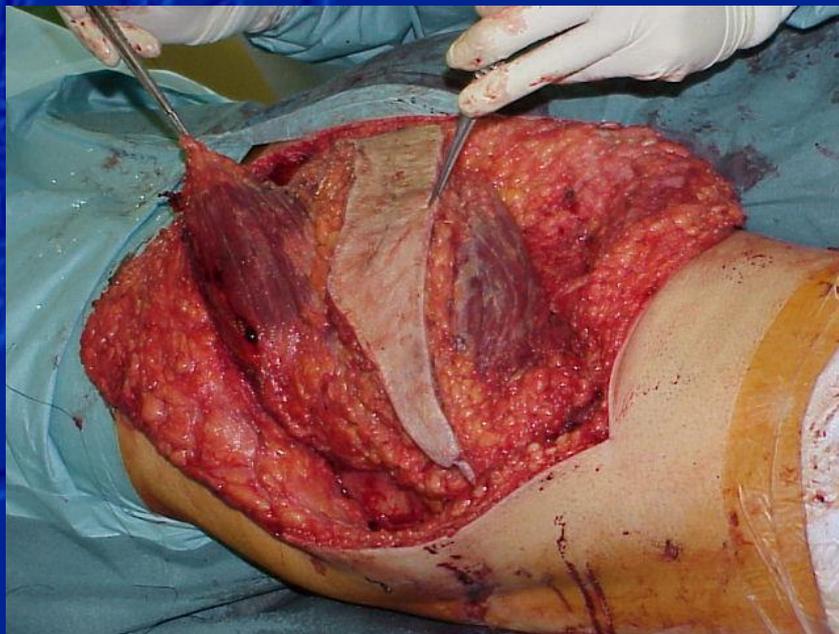
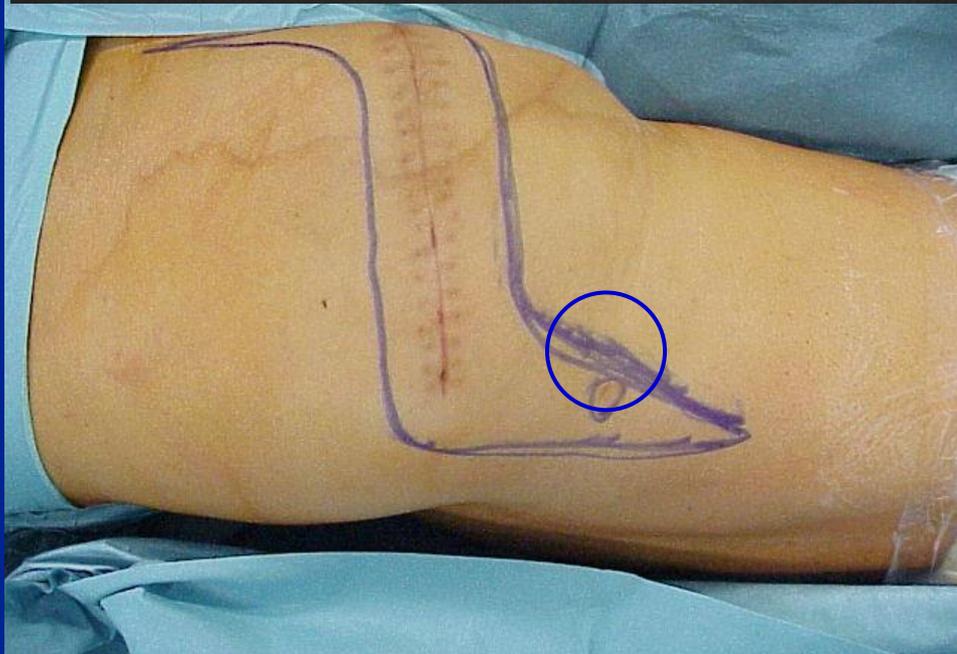
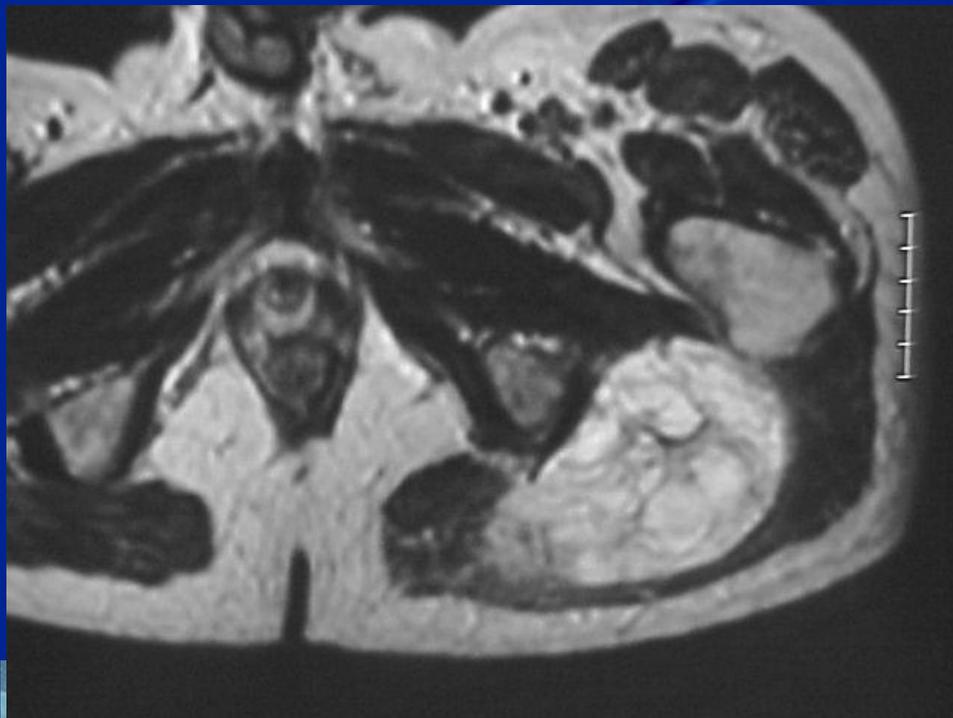
**Mai
incisioni
trasverse**



**Mai
approccio
transgluteo**



Errori nella biopsia

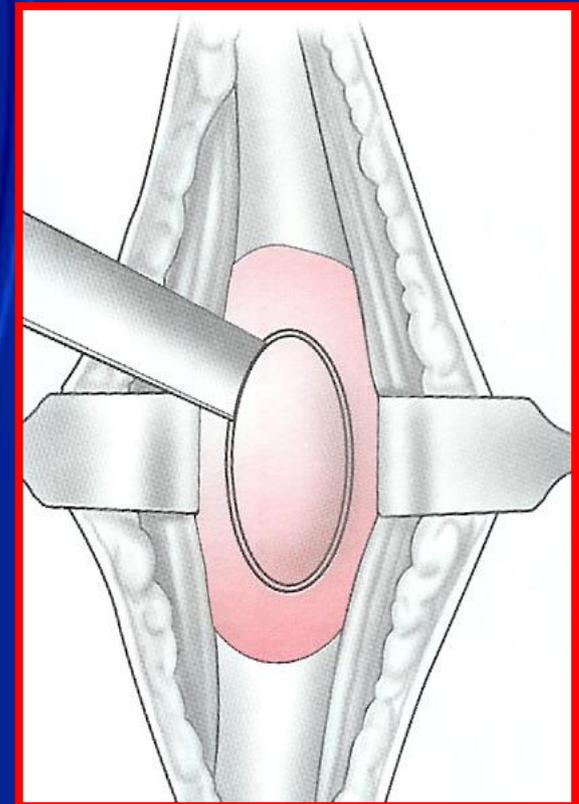
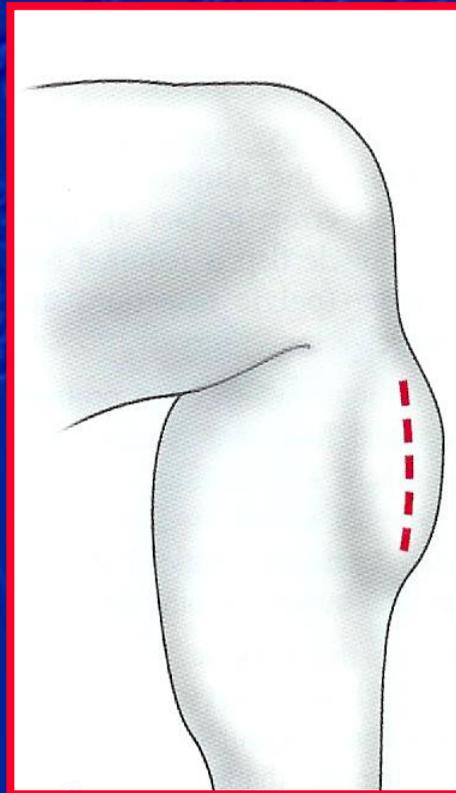
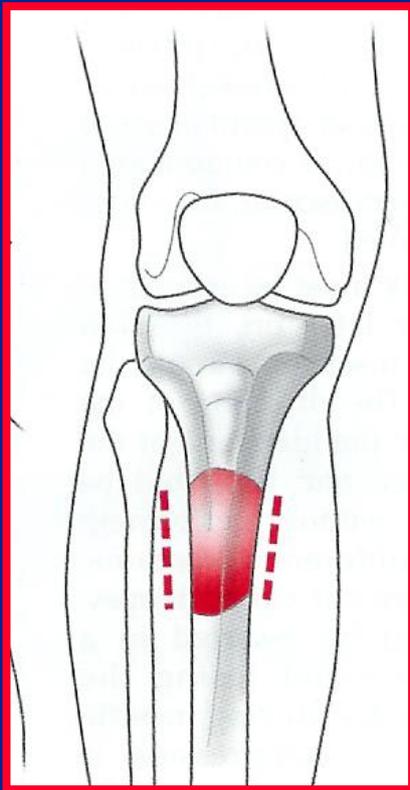


❖ **Non eseguire doppie incisioni**

❖ **Non incidere sulla cute distesa e assottigliata**

❖ **Finestra ovale sull'osso**

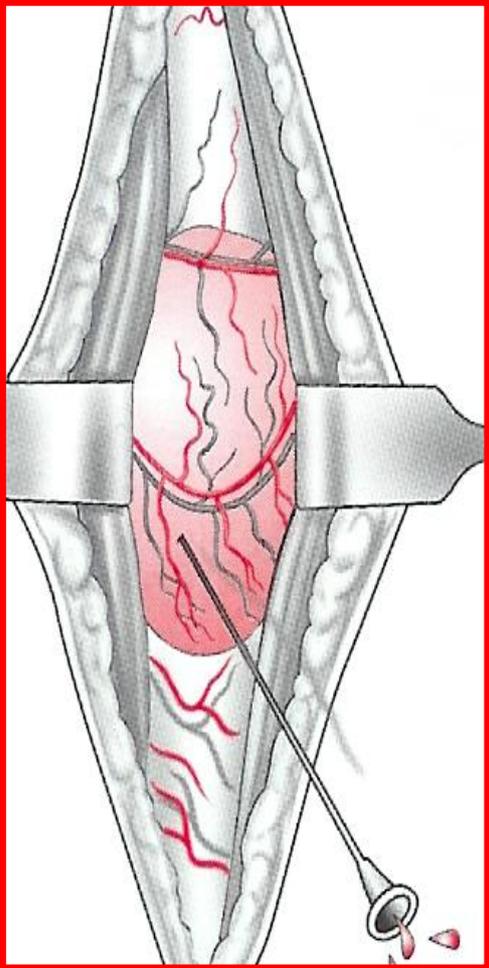
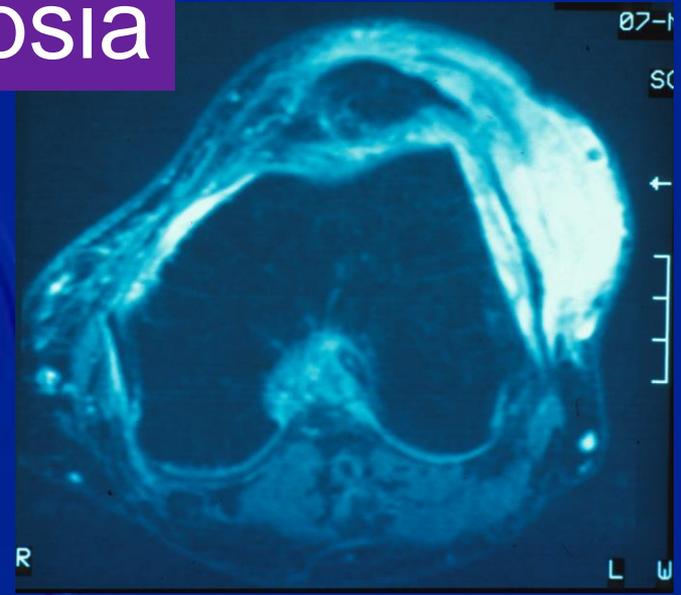
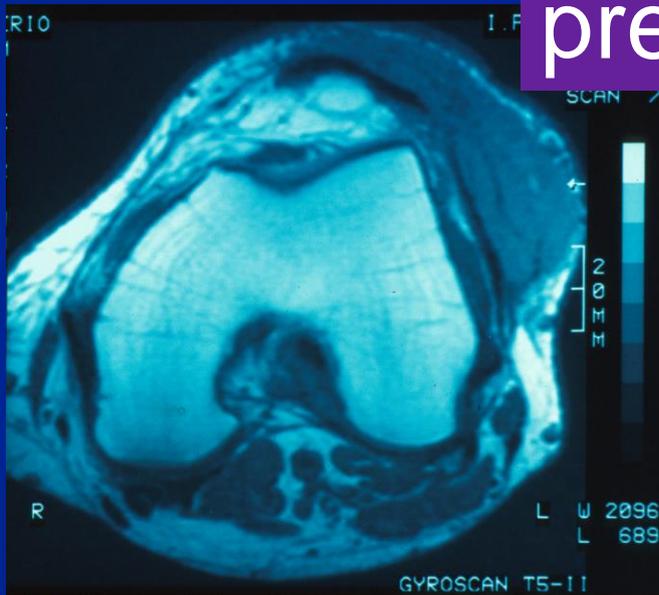
Evita problemi della ferita o infezioni



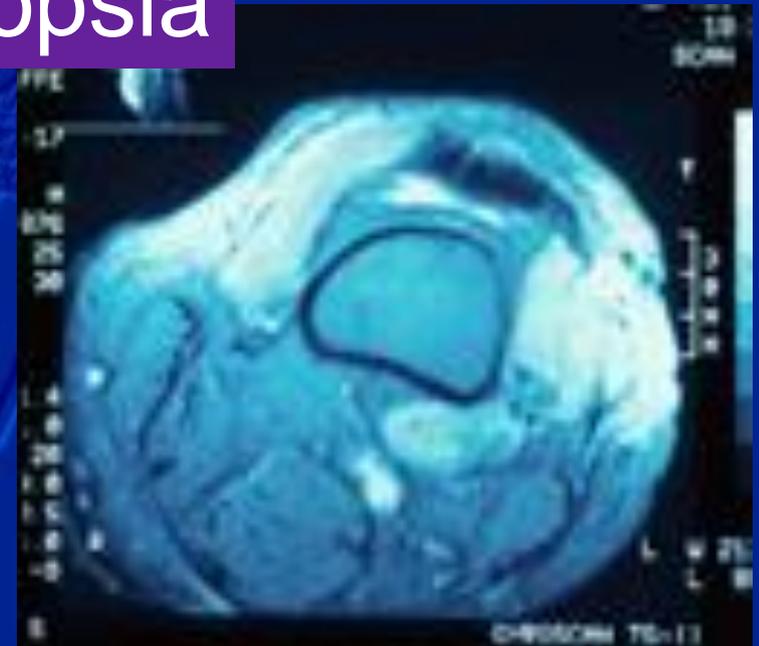
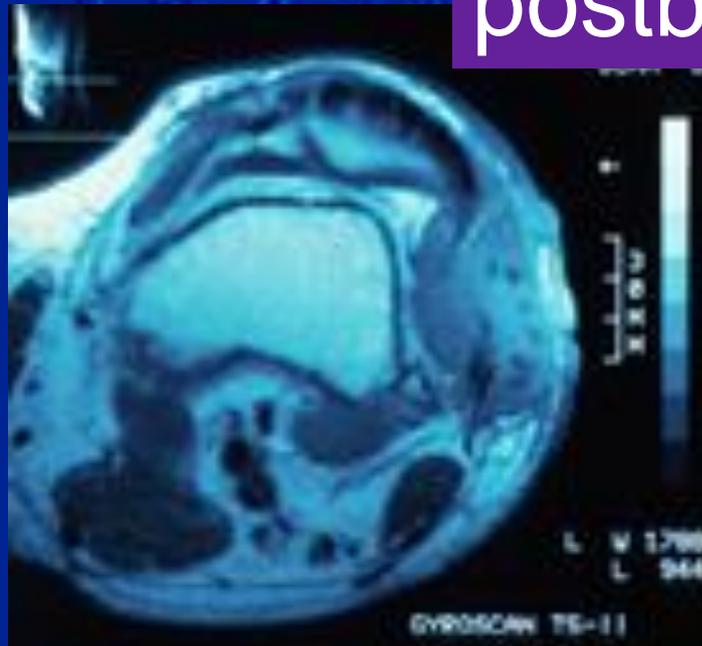
Errori nella biopsia



prebiopsia



postbiopsia



Emostasi
accurata



Ematoma



Infezione

Comparazione di biopsie inadeguate e relative conseguenze tra Ospedali Generali e Centri Specialistici

Mankin 1982

	N° tot	Osp Loc	Osp Spec
N° totale	329	143 (43.5)	186 (56.6)
Errori diagnosi	60 (18.2)	43 (30.1)	17 (9.1)
Problemi corr. biopsia	57 (17.3)	44 (30.8)	13 (7.0)
Modifica Trattamento	60 (18.2)	45 (31.5)	15 (8.1)
Modifica Prognosi	28 (8.5)	19 (13.3)	9 (4.8)

L'Istologia non è tutto



**Stessa istologia
ma differente
comportamento
biologico**

Chondroblastoma

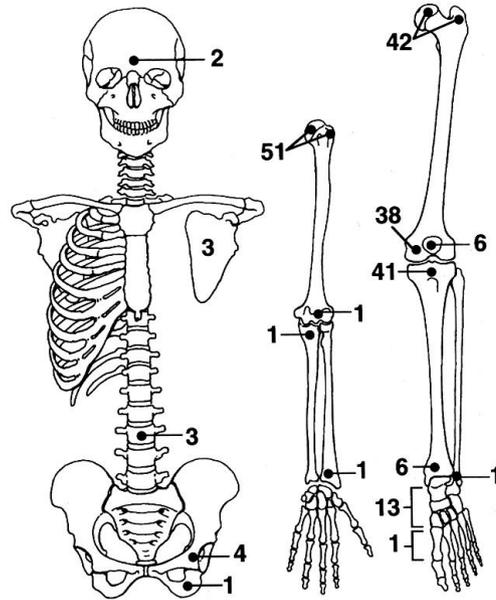
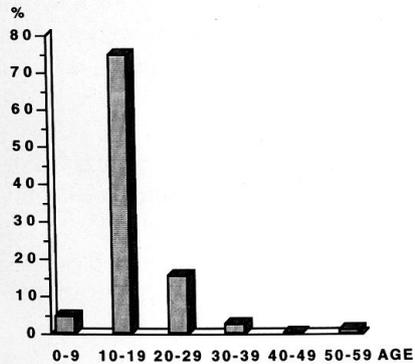
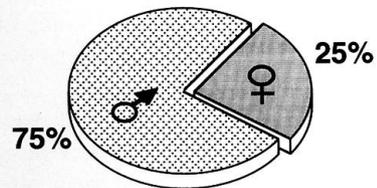


Fig 15-1. Sex, age and localization in 215 cases of chondroblastoma.

«quiescente»

chondroblastoma
90 % guarisce
dopo curettage convenzionale

cresce in anni

«attivo»

cresce in mesi



TSE T1



STIR



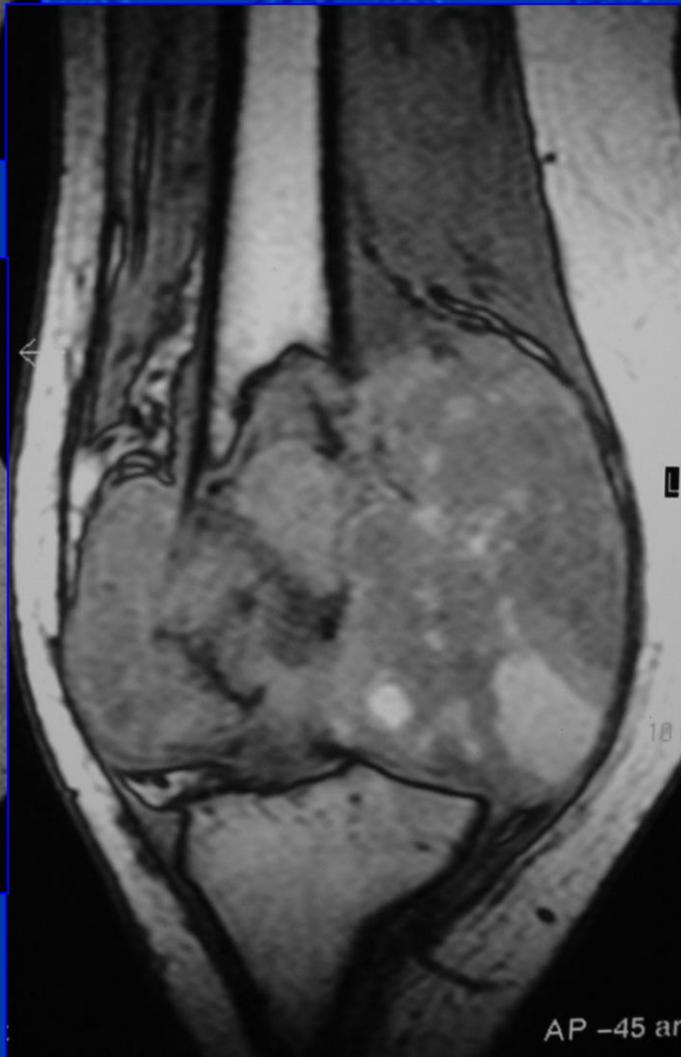
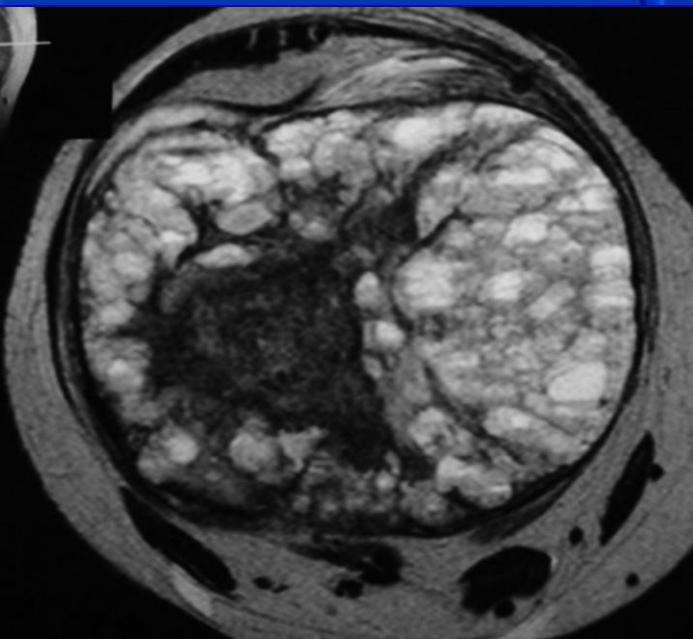
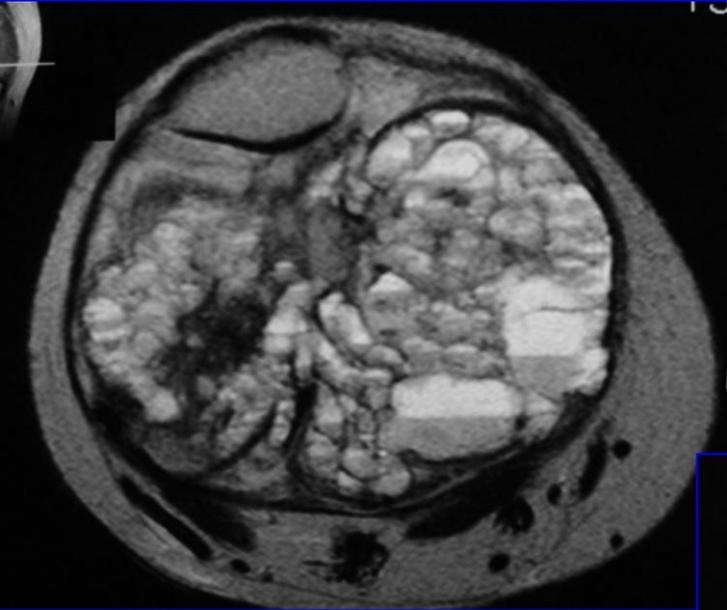
«*aggressivo*»

crescita rapida



«pseudomaligno con ABC»

Crescita esplosiva e distruente





*..... e così
confusi si giunge
all'intervento
chirurgico....*

Errori di indicazione chirurgica

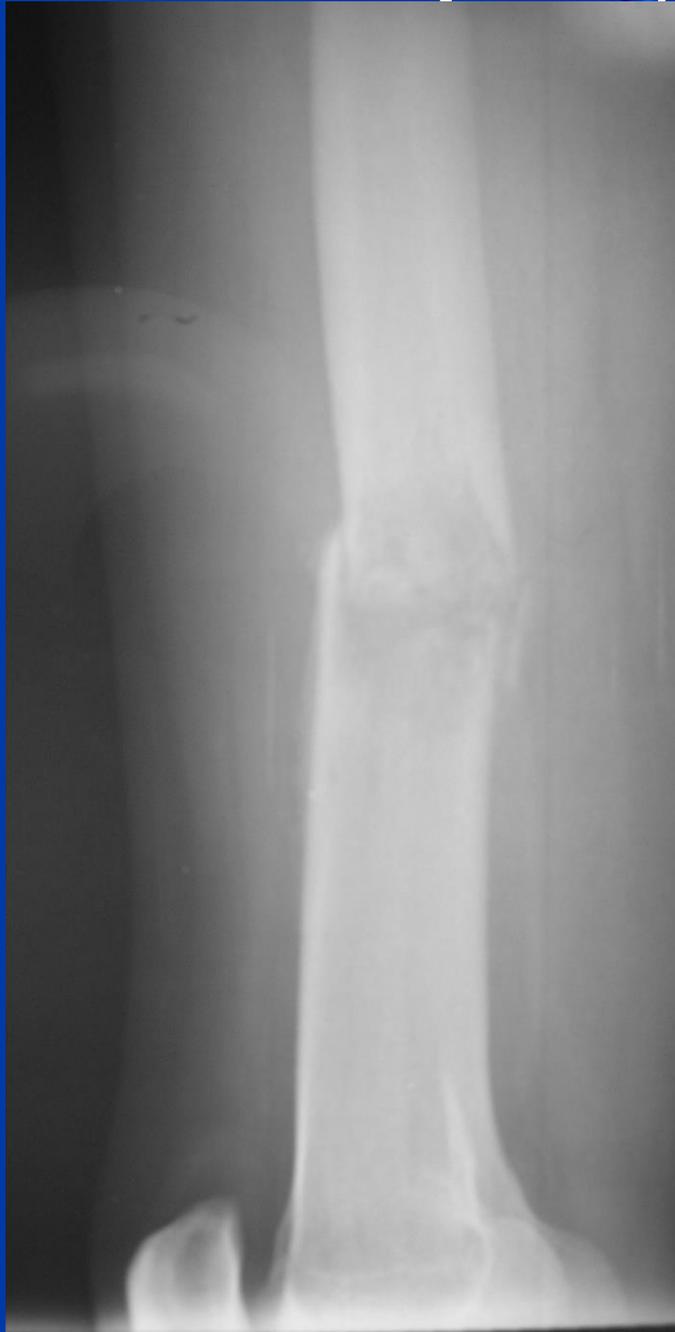


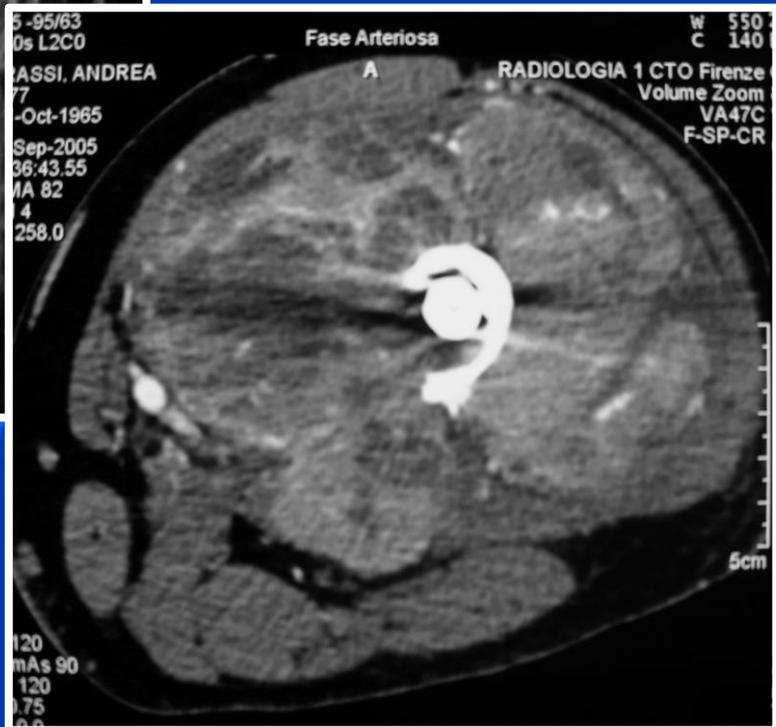
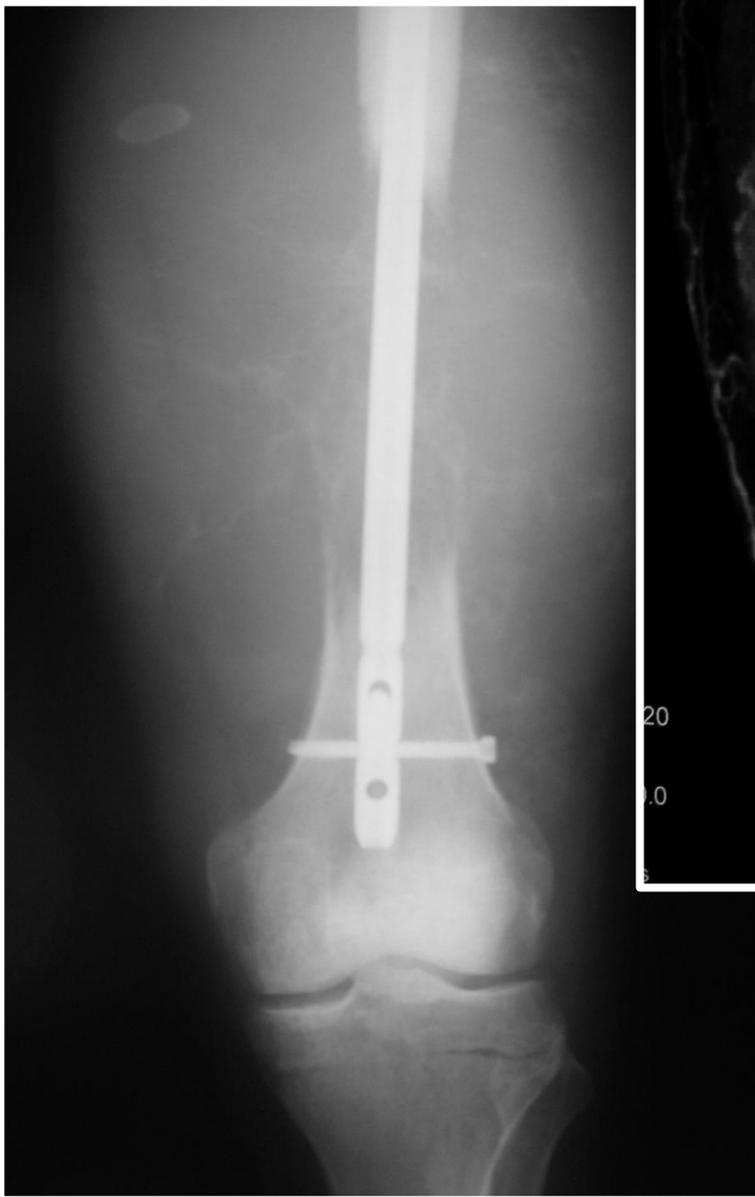
- Trattamento del trauma
(entro 24-48 h)
efficienza

.....quando l'ottimo è nemico del bene

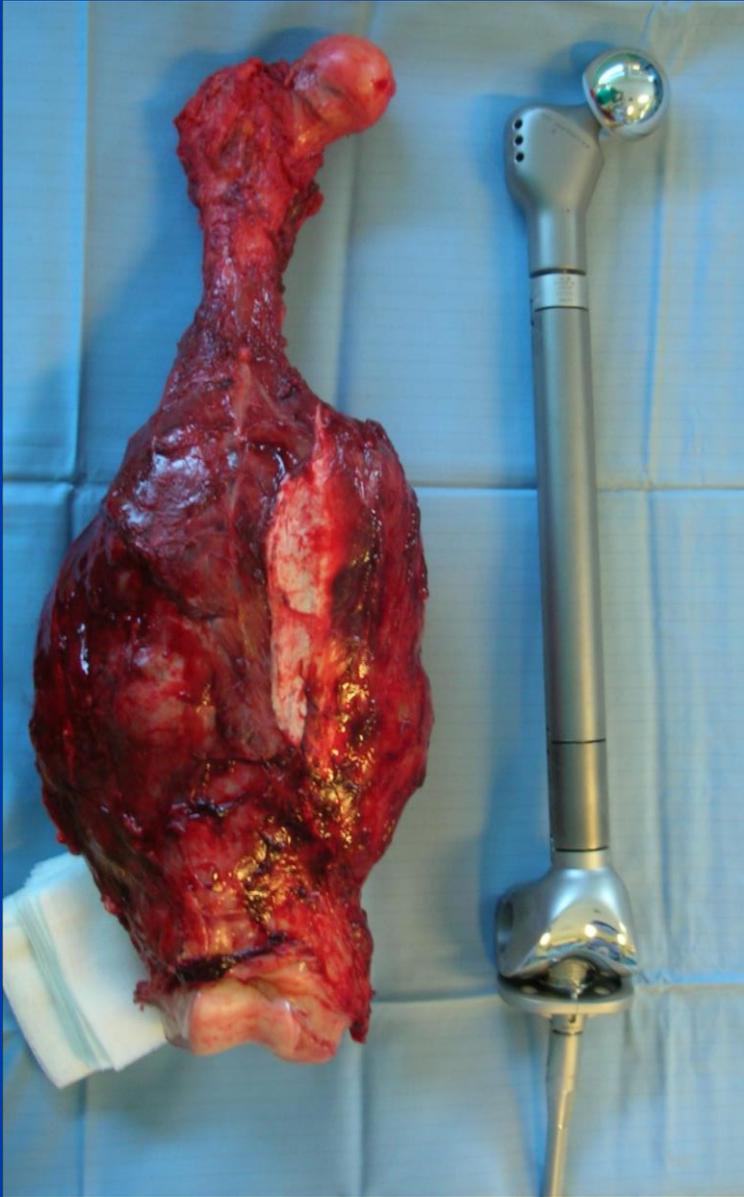
Maschio 40 aa

frattura patologica del femore (cisti? Metastasi?)

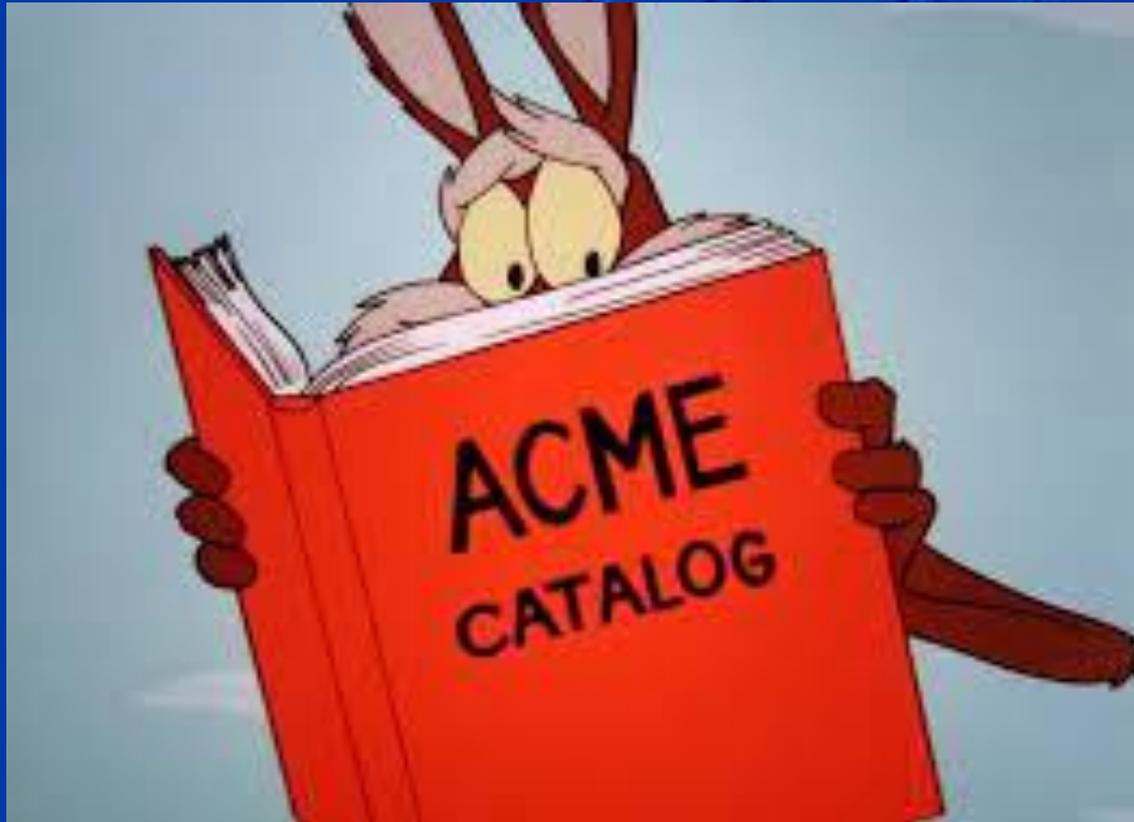








Errori di pianificazione chirurgica



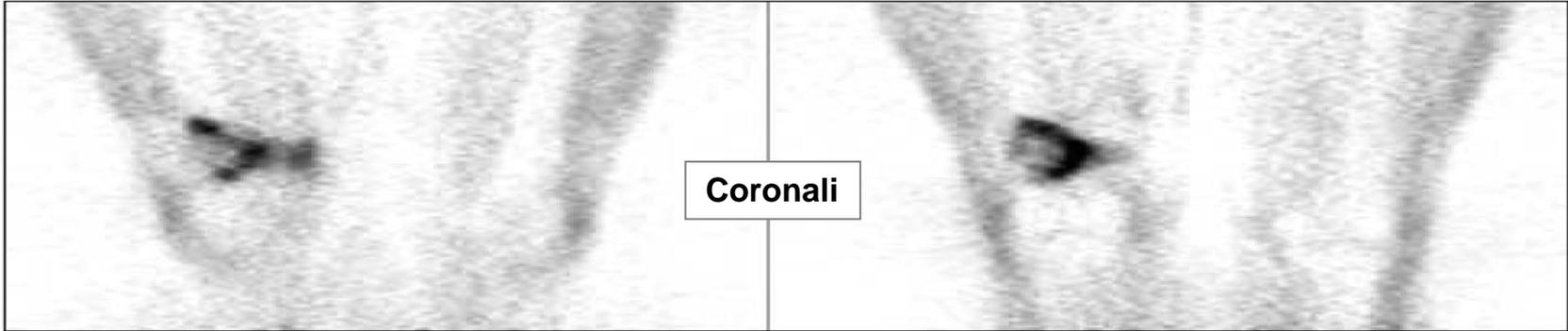
**Rivedere
sempre
tutta
la storia passata
del
paziente**

Asportazione altrove

- «tolto tutto»
- «superficiale»
- «no analisi del pezzo anatomico»
- «istologia dopo 2 mesi » sinovialsarcoma
- «esami preop. persi»

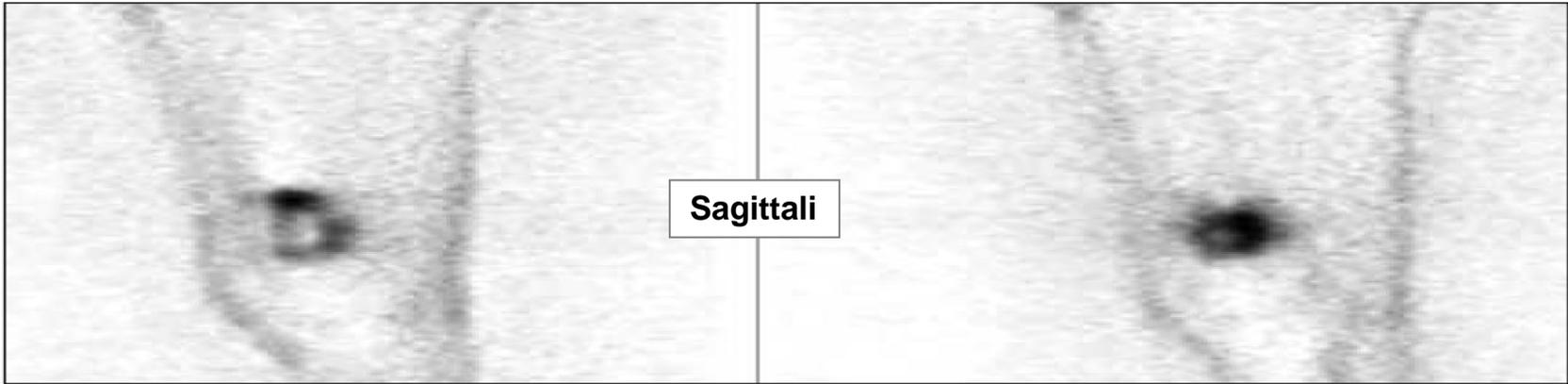


**Tempo previsto
di
radicalizzazione
(solo cutanea
superficiale)
... <1 ora
di chirurgia...**



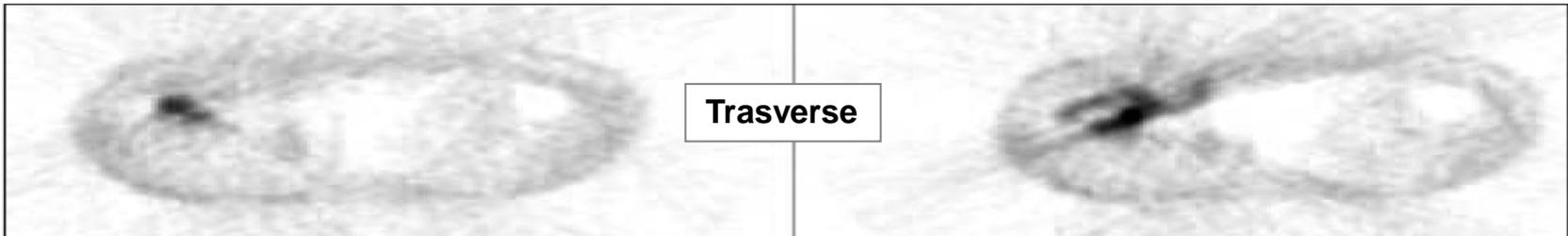
Coronali

Fig.1



Sagittali

Fig.2

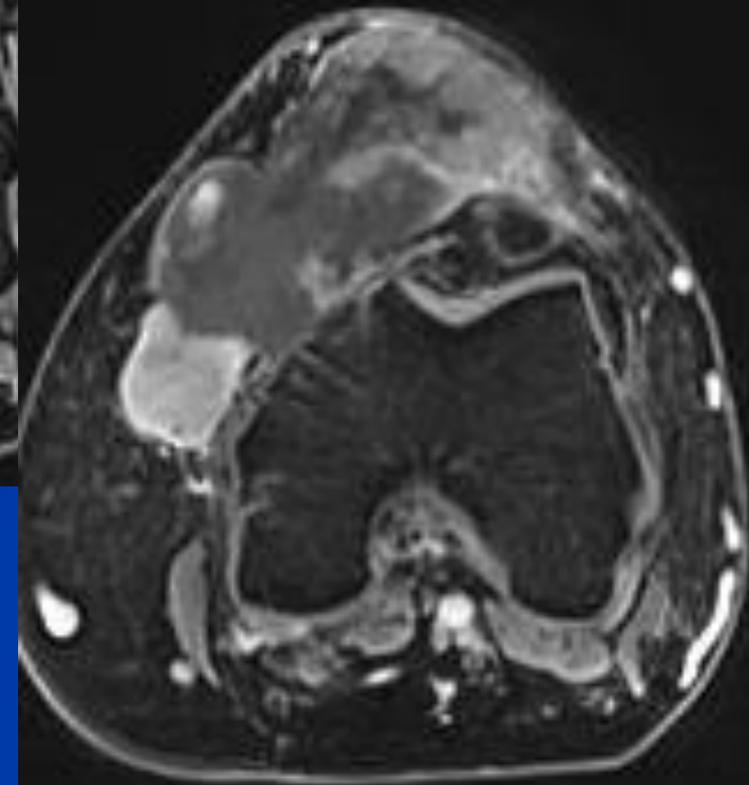
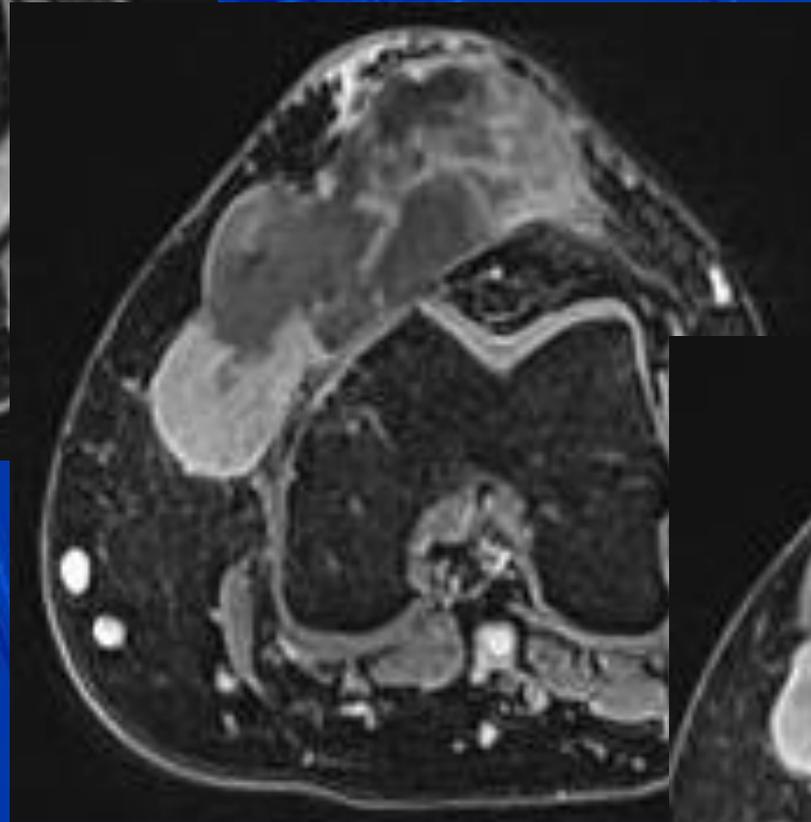
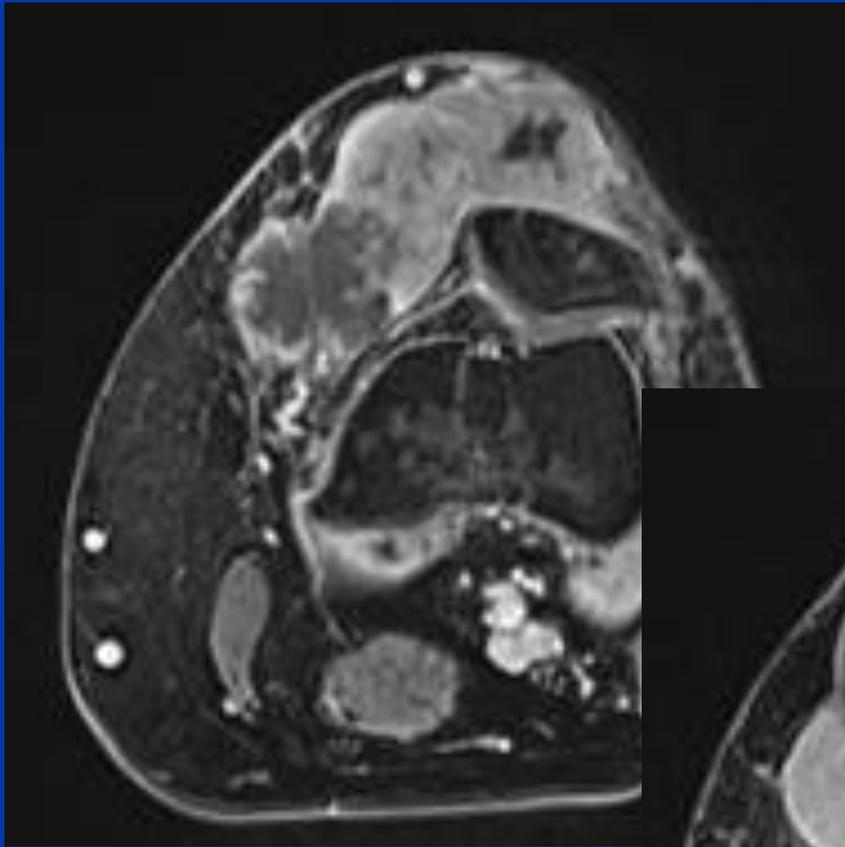


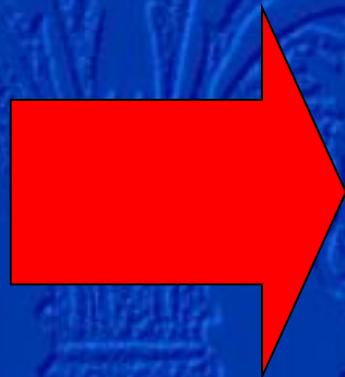
Trasverse

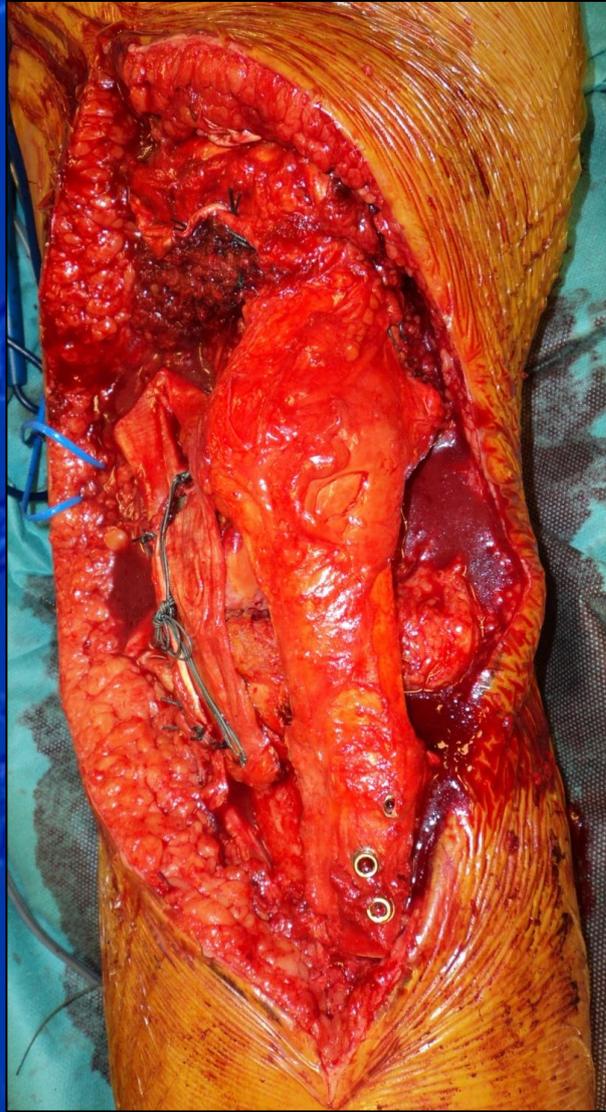
Fig.3

Revisione della documentazione preoperatoria MRI

...



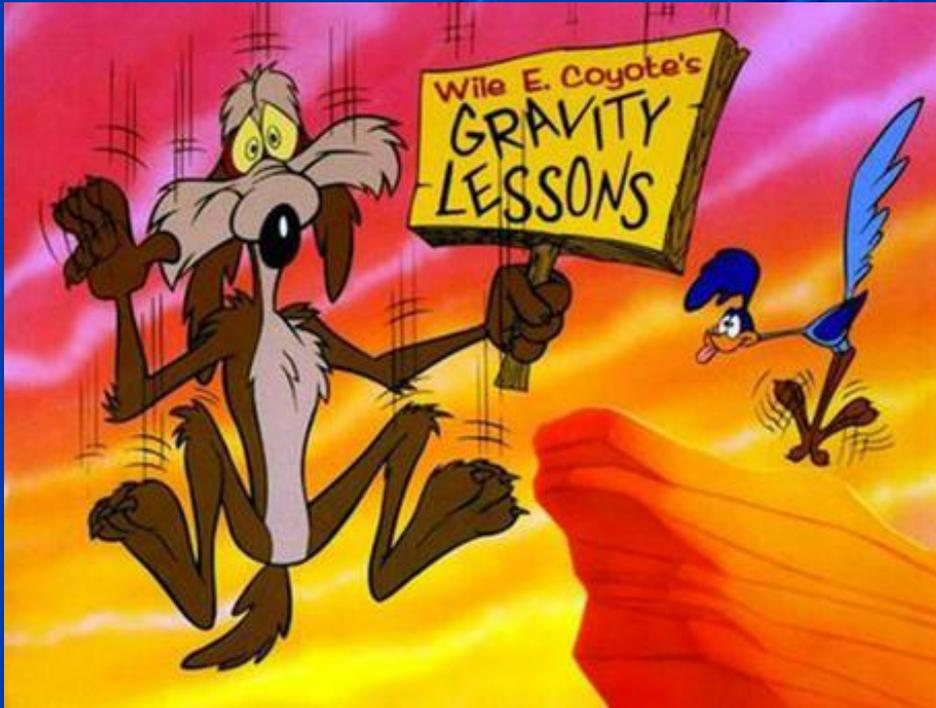




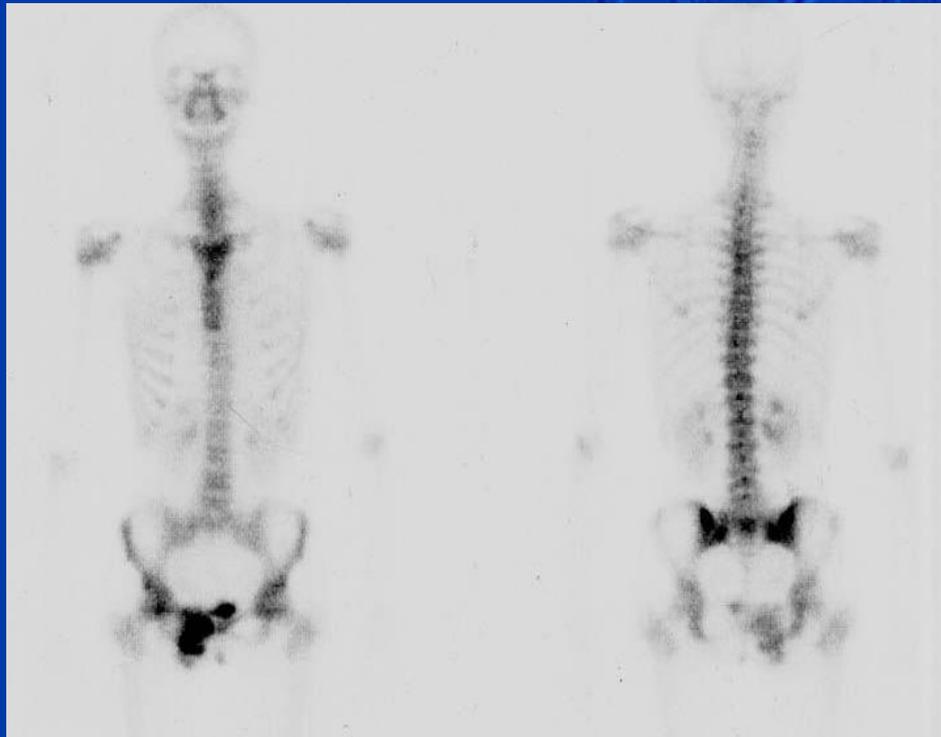


12 hours
surgery ...

Errori di pianificazione chirurgica



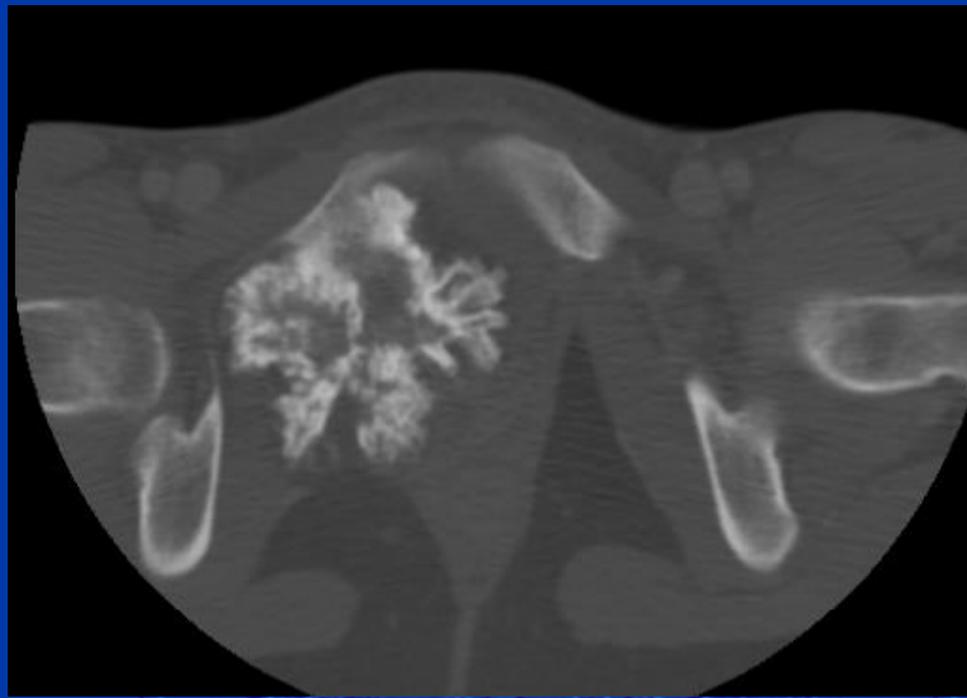
**Non sottostimare
ogni
minimo dettaglio
di allerta
sulla base di
presupposti
teorici :
la medicina
non è
matematica**



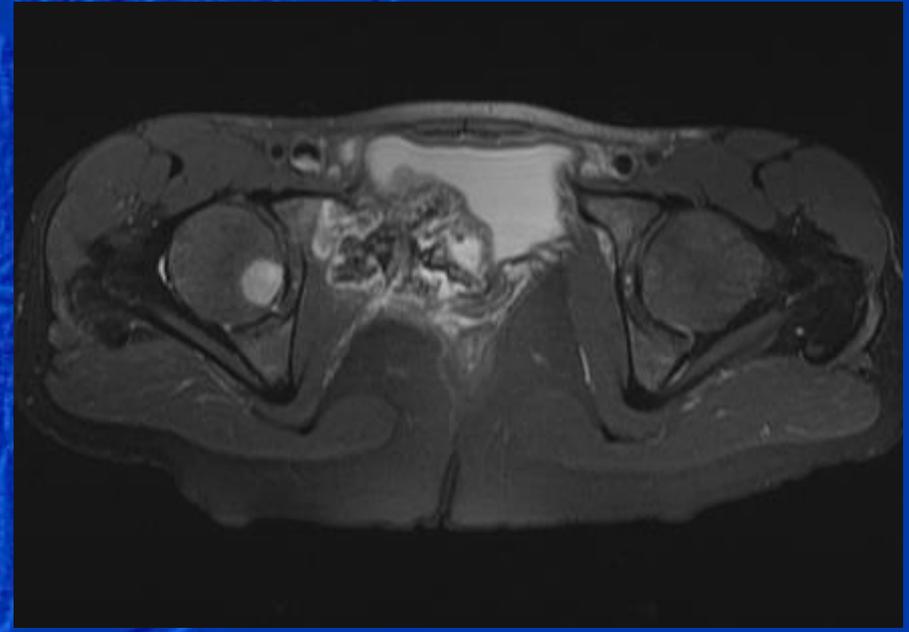
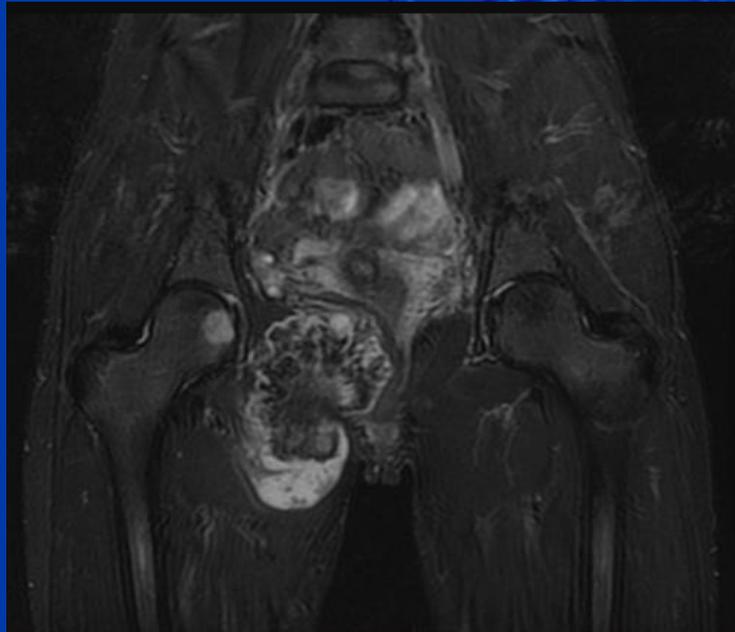
Esostosi /Cs grado 1 pelvi

**Spot captazione epifisaria
(Rx e TC negativa)
asintomatica**

Null'altro da segnalare



**TC
negativo**



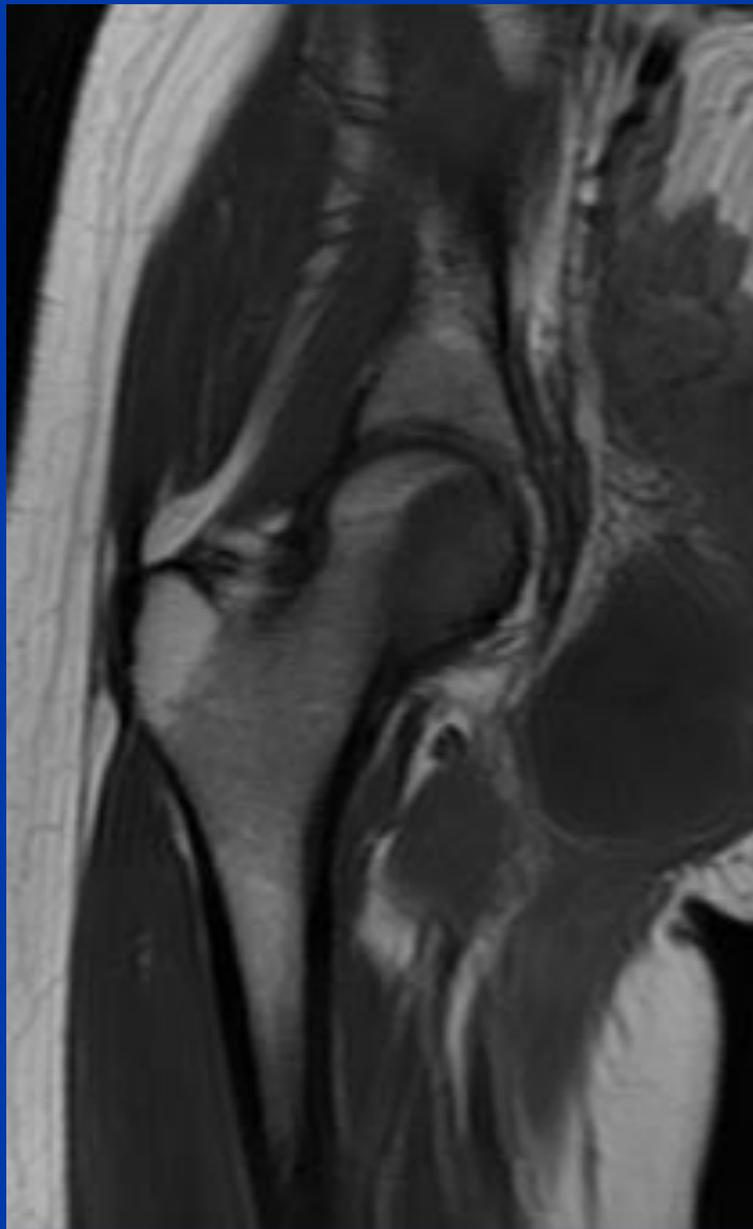
**Rnm tipico CS Periferico basso grado
con edema epifisario**

Resezione del bacino

CS periferico grado 1

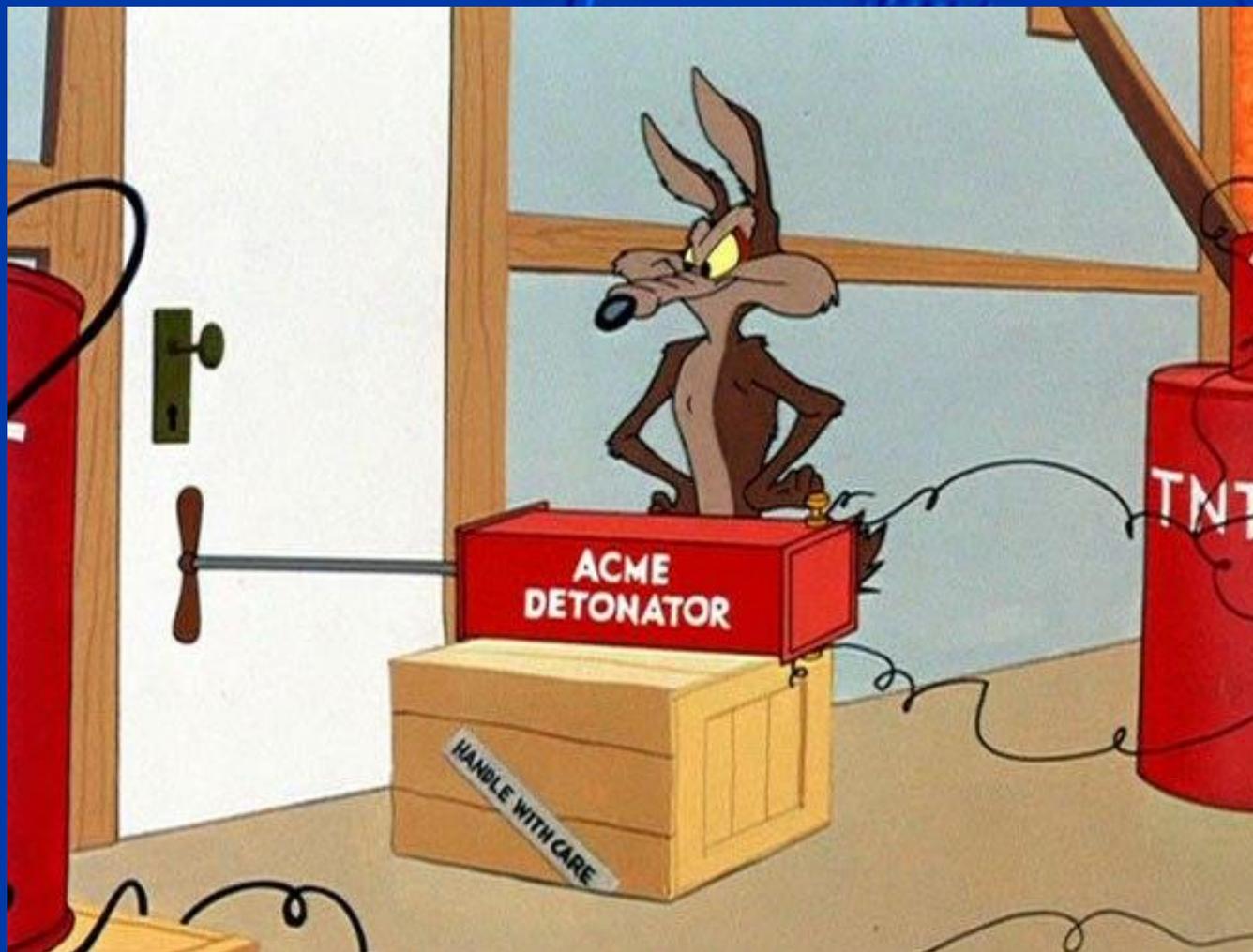


**Scintigrafia
ipercaptante con più spot
e incremento volumetrico**



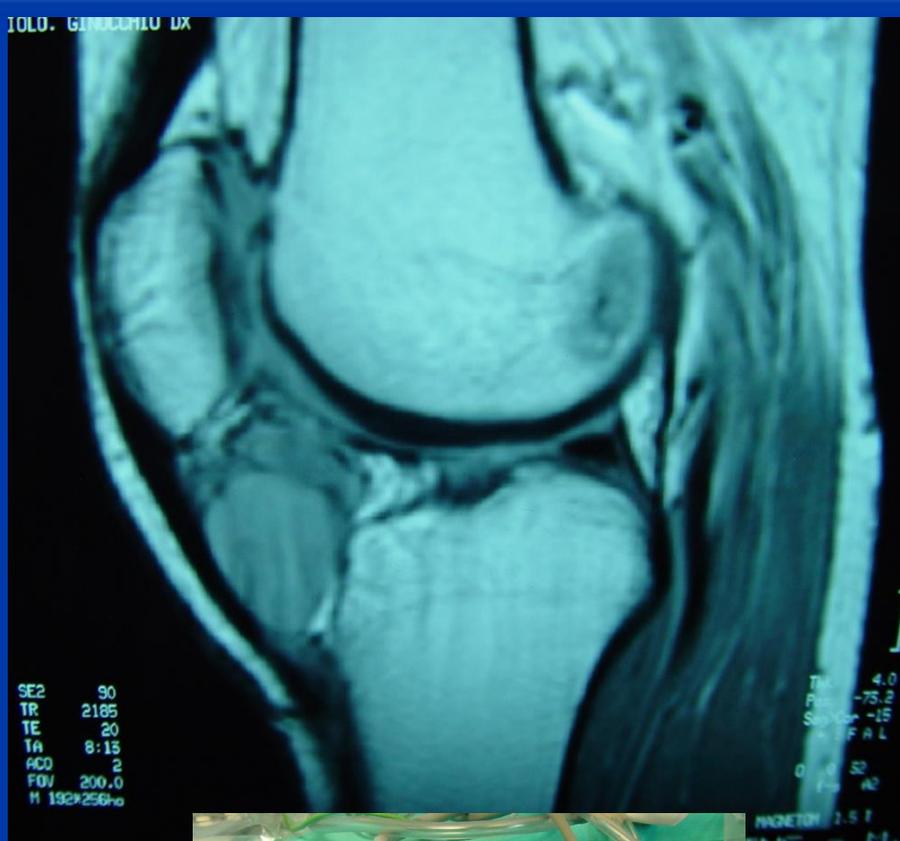
**Skip metastasi transarticolare
e progressionedi malignità**

Errori di indicazione chirurgica

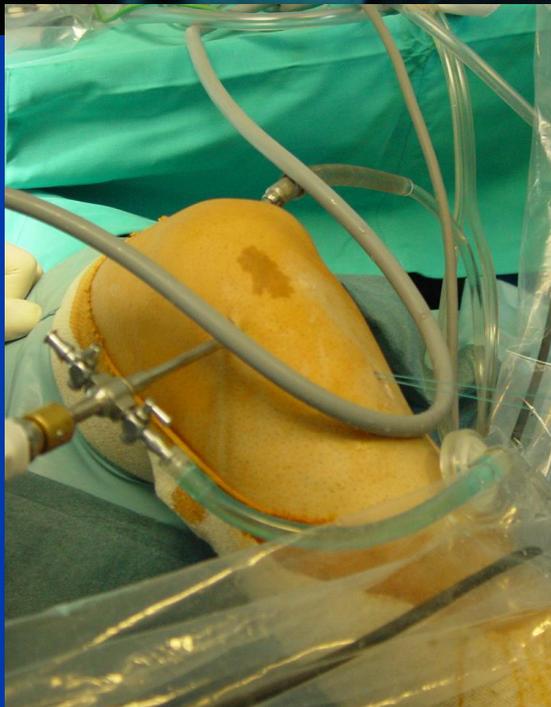
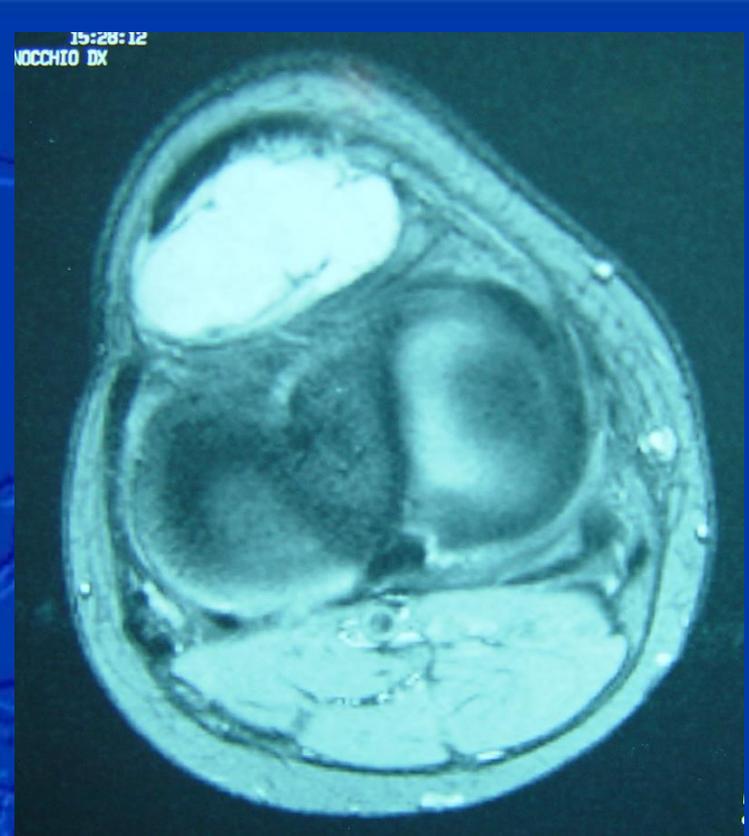


Esegui
sempre
l'intervento
che è
corretto
sotto il
profilo
oncologico

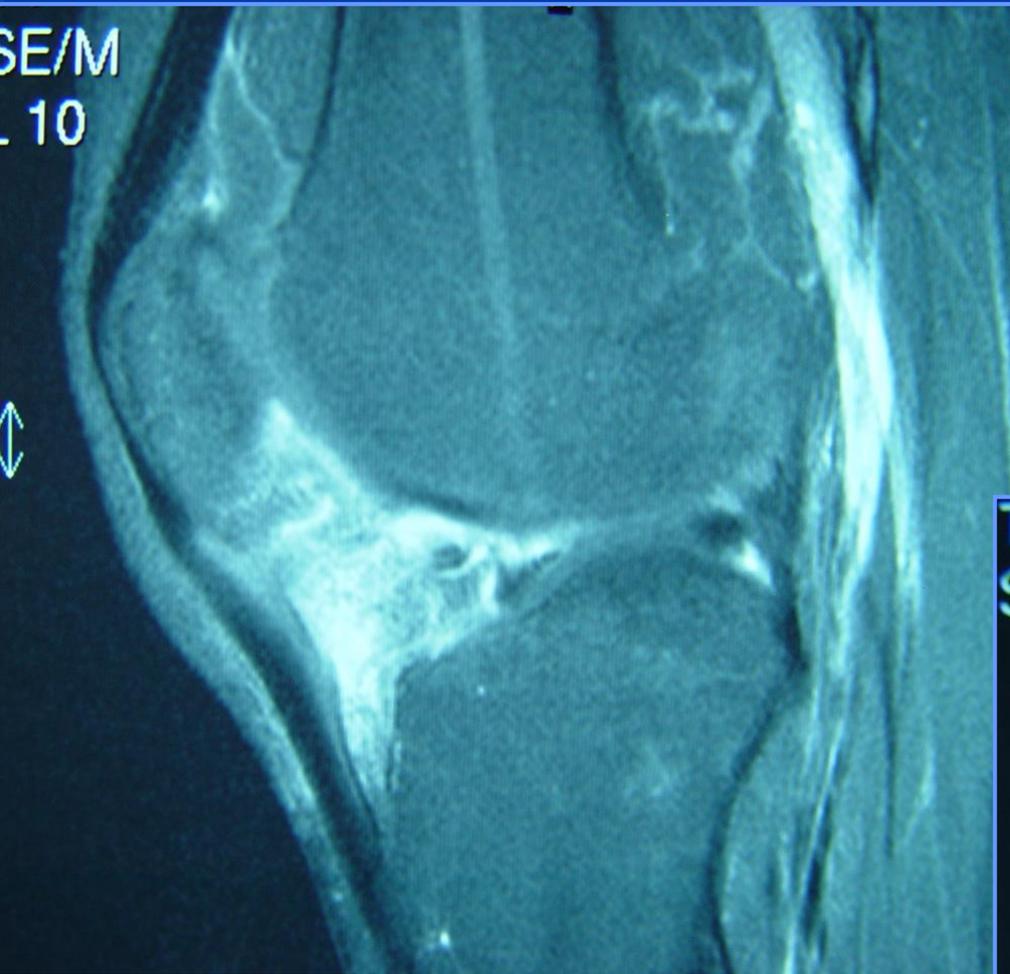
IOLO. GINOCCHIO DX



15:28:12
GOCCHIO DX



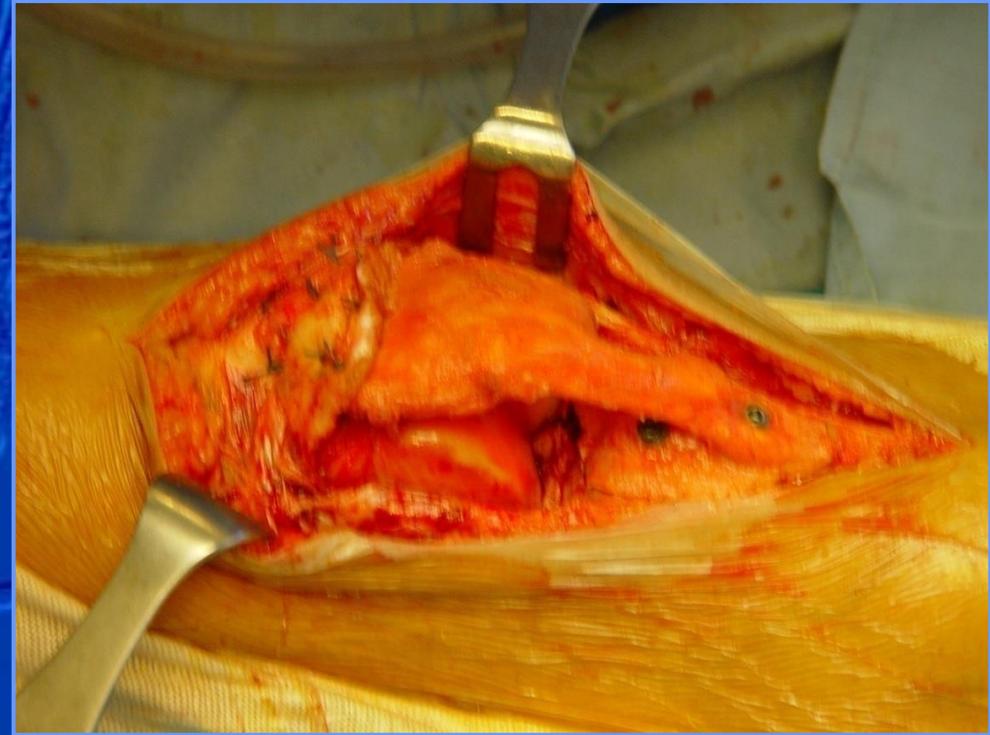
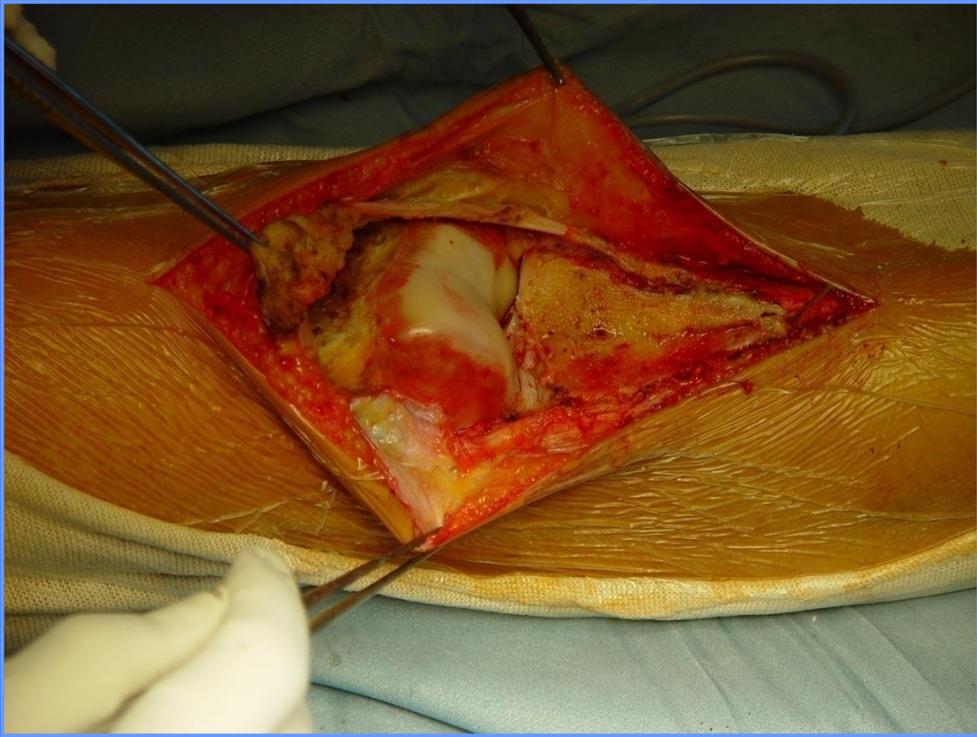
**Sarcoma Sinoviale
trattato con shaving
artroscopico senza
previa biopsia !!!!**

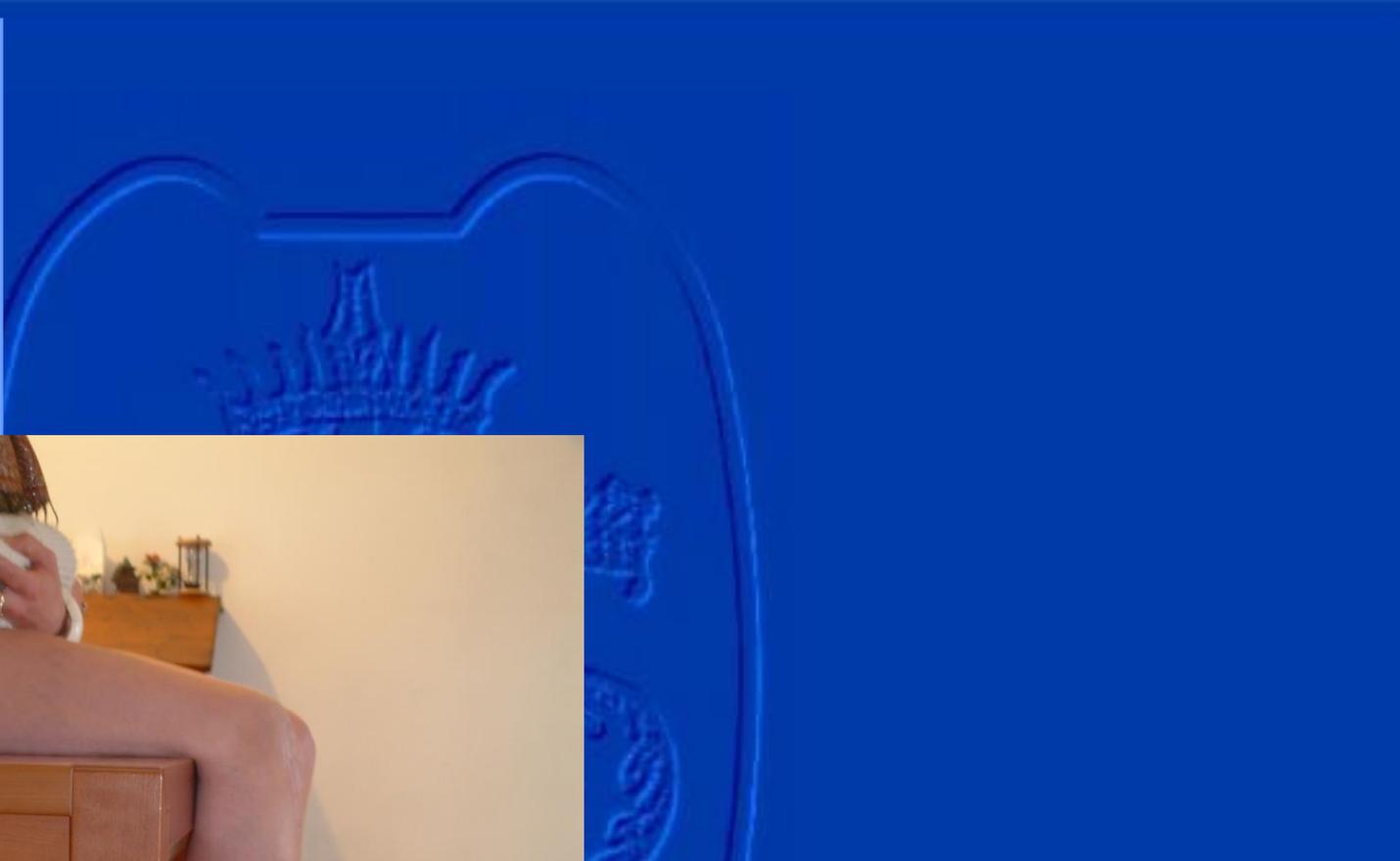


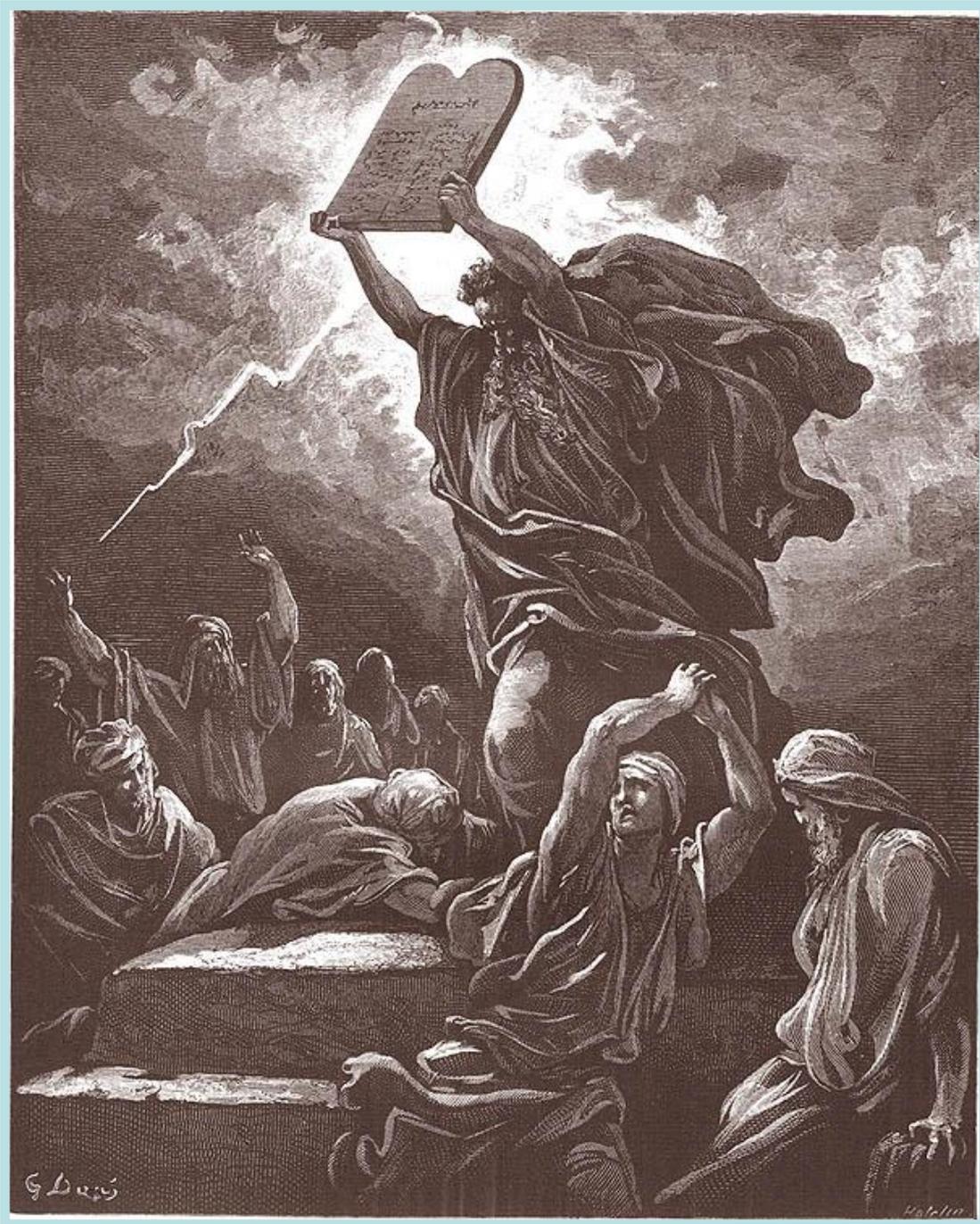
**PET
negativa**



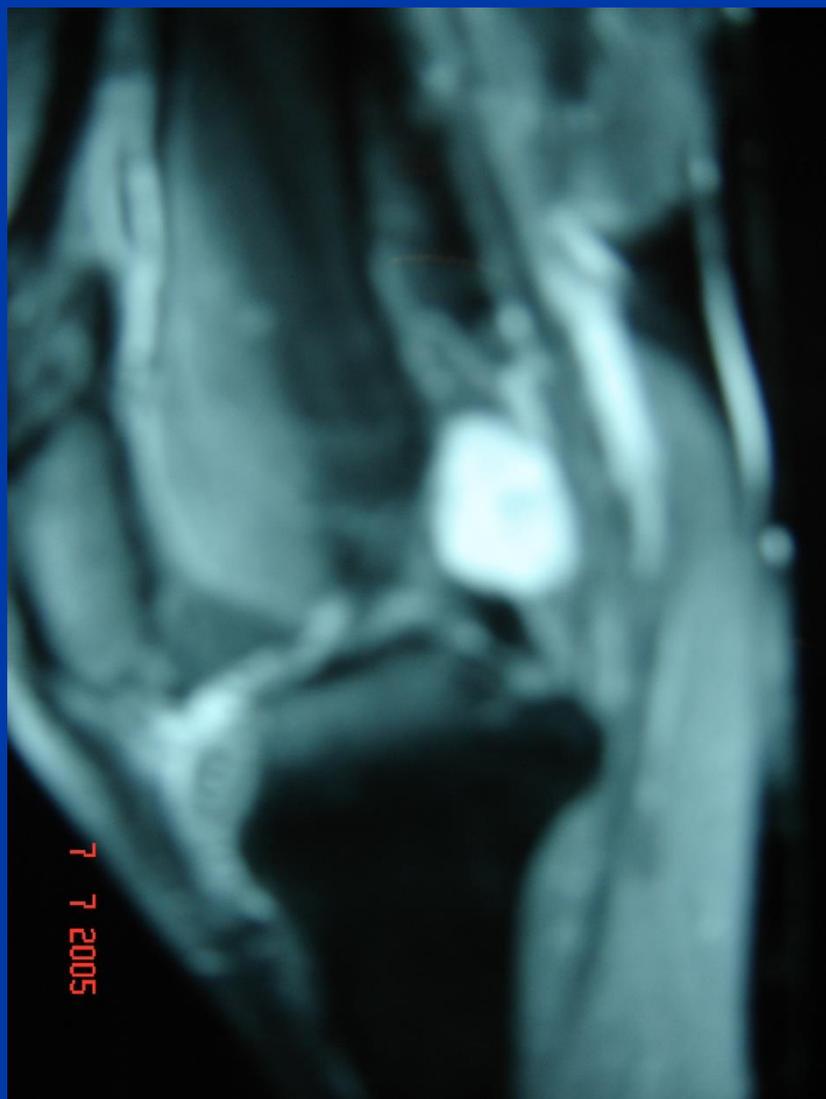
**Buona risposta
alla
chemioterapia
preoperatoria**



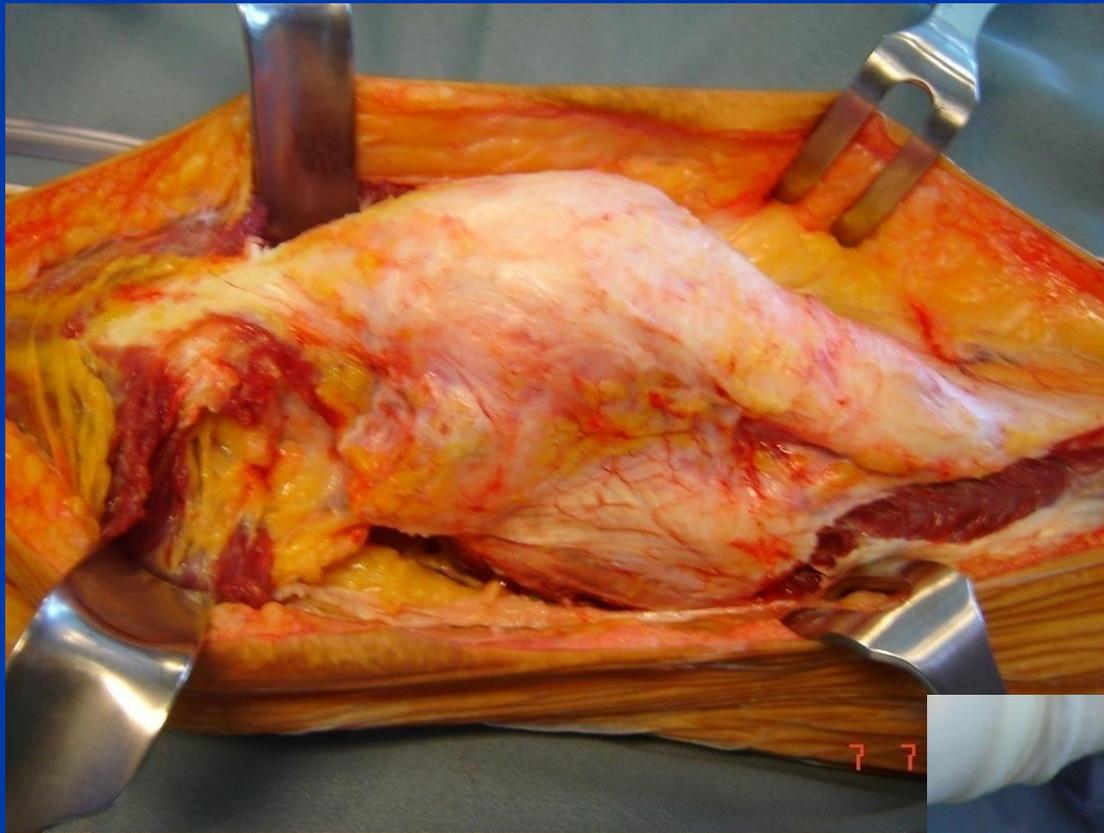




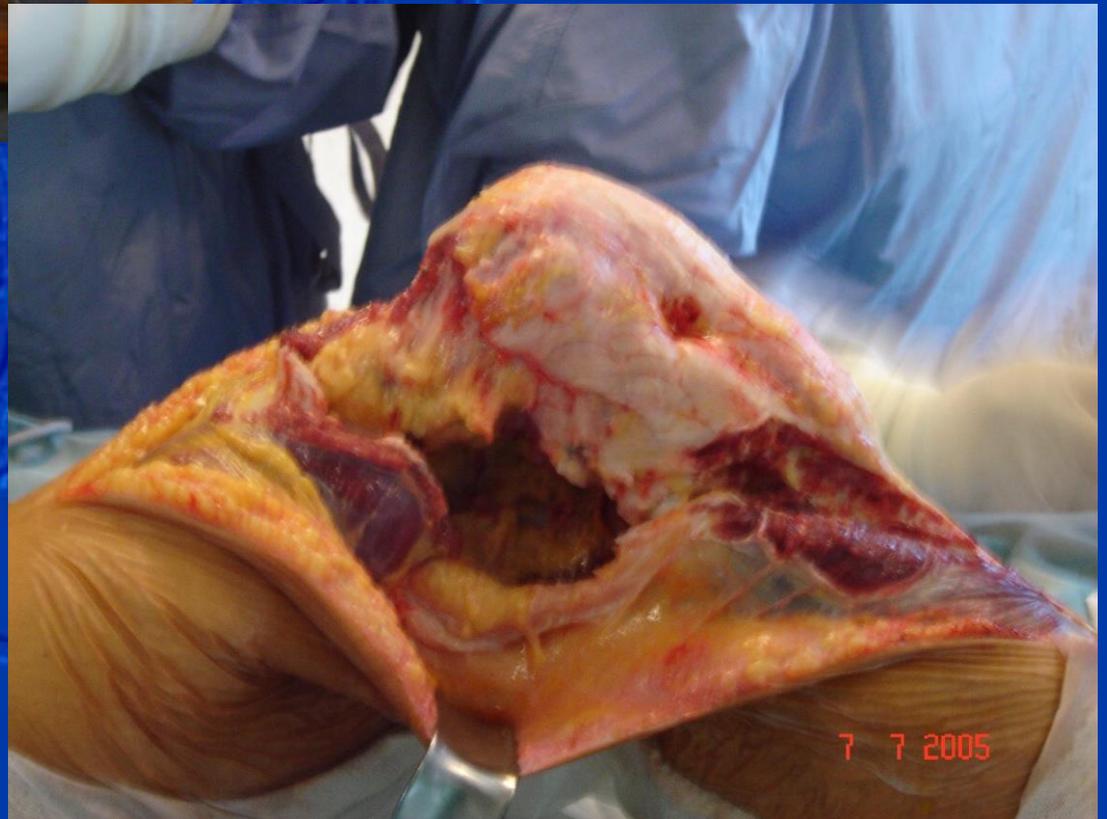
**DECALOGO
SUL
TRATTAMENTO
CHIRURGICO
DEI TUMORI
DELL'OSSO
E DELLE
PARTI MOLLI**



**Recidive plurime
da insemenzamento artroscopico
della sinoviale posteriore del ginocchio**

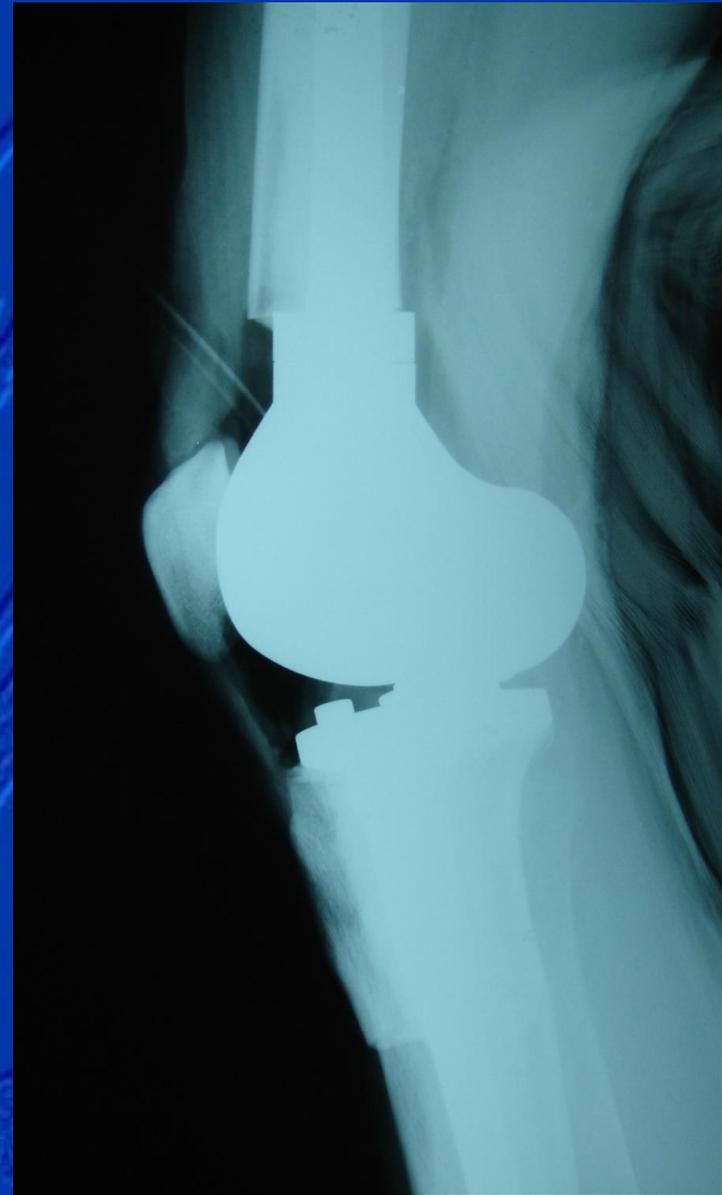


**Completa fusione
tendinea e ossea**



Resezione in blocco extraarticolare del ginocchio





**Salvataggio con Megaprotesi di femore distale
e protesi composita di tibia prossimale**

Errori di tempistica chirurgica



**Non essere
inerte
o
perdere
tempo**

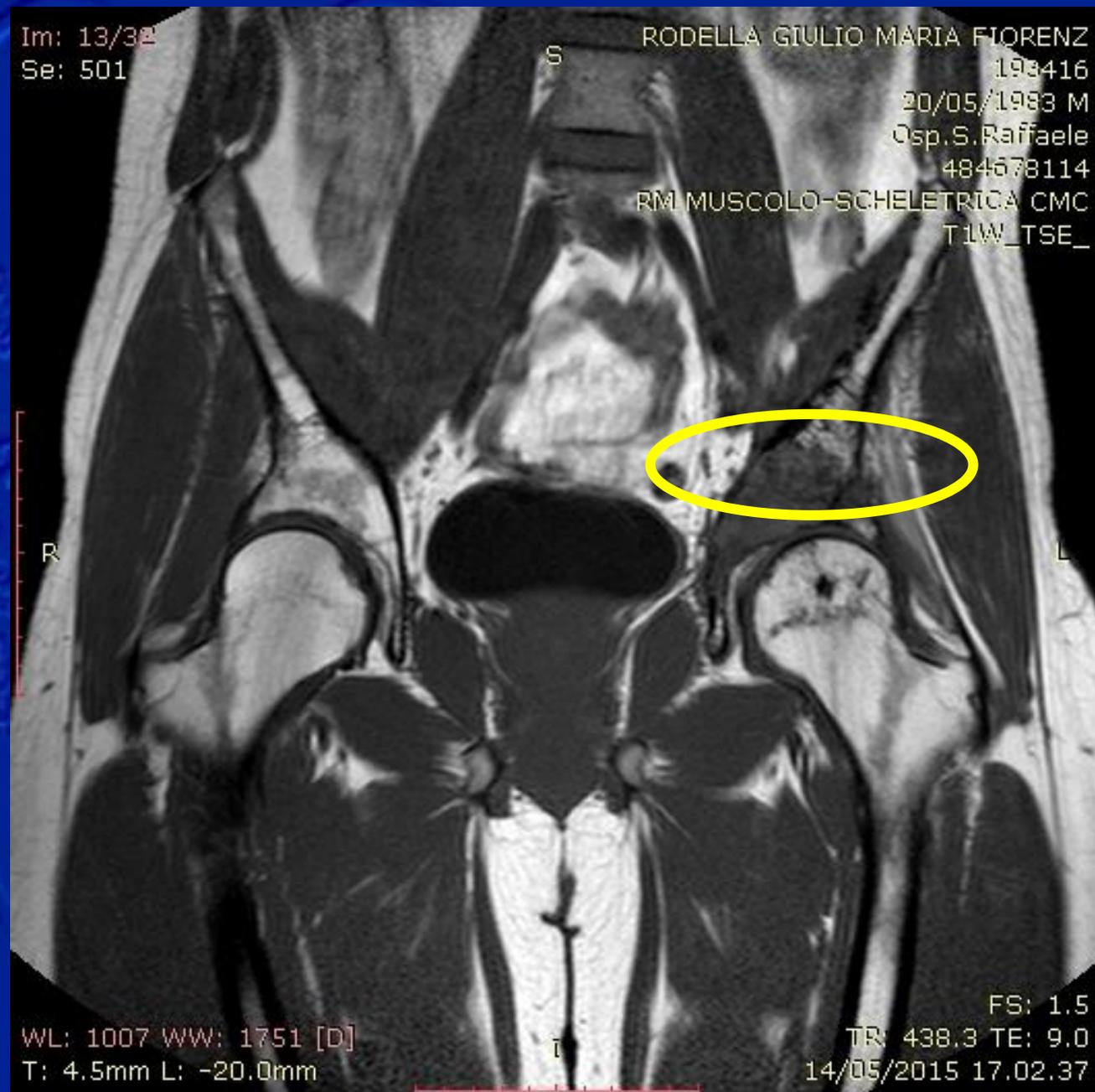
uomo

32 aa

10 aa prima
Ewing sarcoma
Rxth & Chth

osteolisi
periacetabolare

osteosarcoma
radioindotto

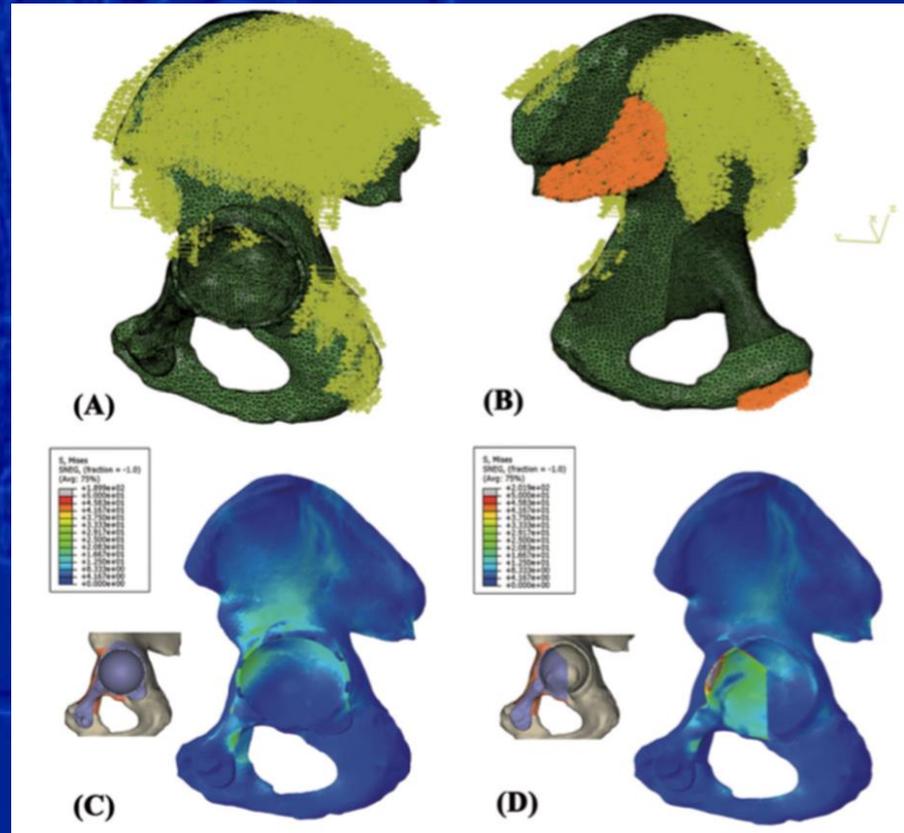




SpatRes:0.000

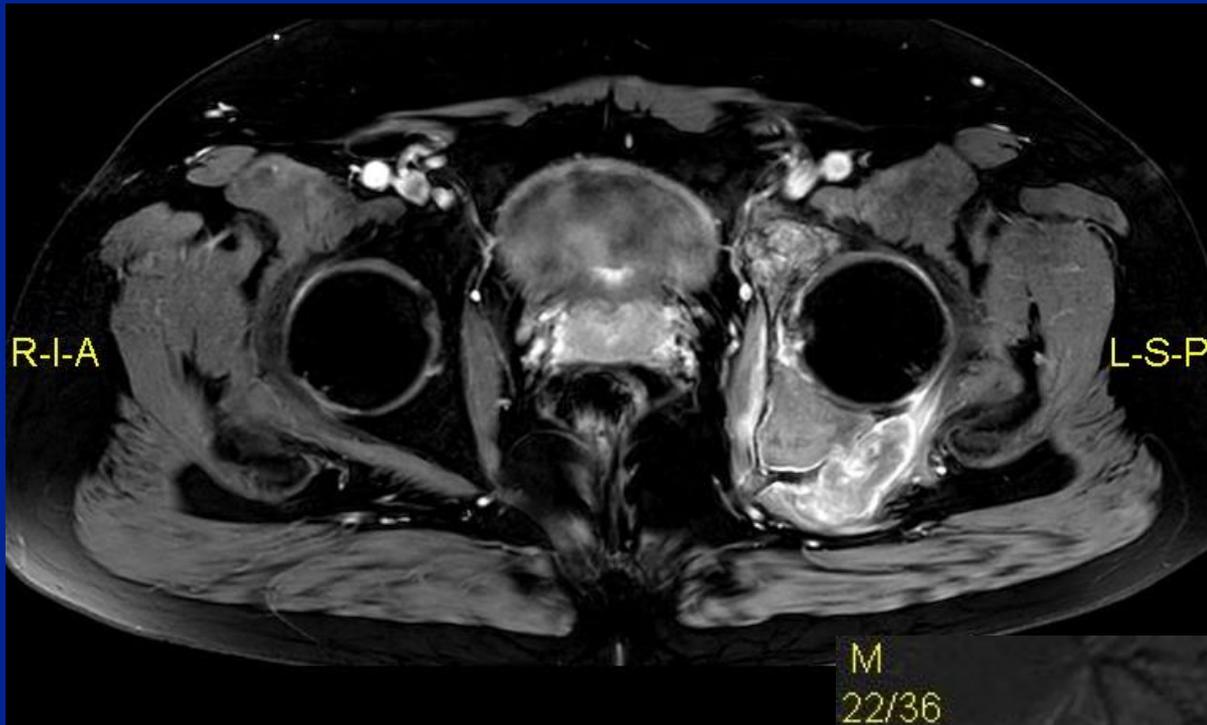
Sens:0.000

view:0.000
RefPhys:
SpatRes:0.000





Grade 1 chondrosarcoma



....3 mesi dopo

**Progressione
volumetrica
e
estensione
parti molli**





Ch



Conclusione



L' Ortopedia Oncologica
presentando tali e tanti
rischi di errore
in ogni fase
del percorso clinico
richiede
competenza ed
esperienza specifica
nel settore per
affrontare
ogni situazione di
pericolo imprevisto