



Utilità del «computer Assisted» per la pianificazione preoperatoria nella chirurgia della spalla e del gomito

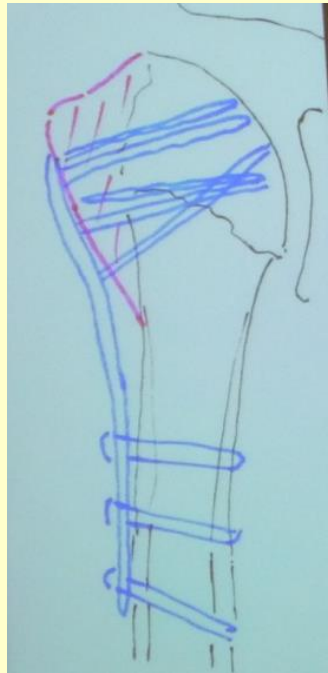


M. Fontana, R. Rotini

Bologna

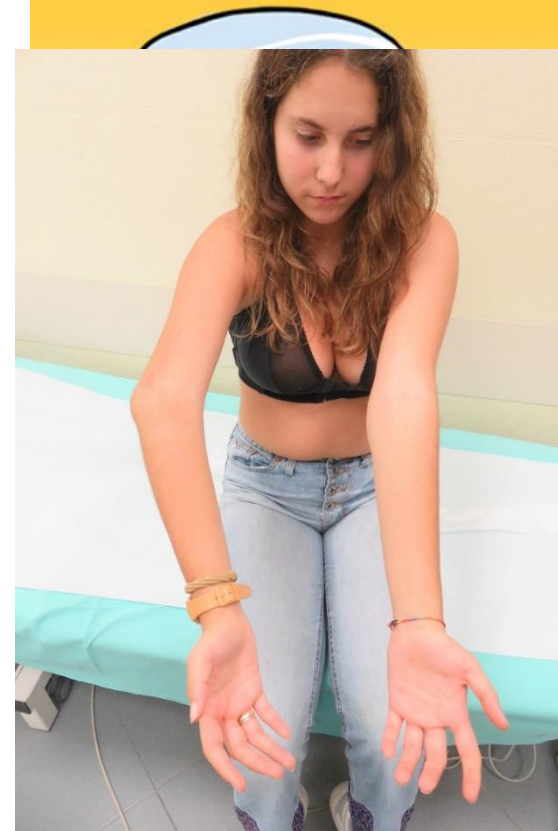


*Ricostruzione 3D mentale con
planning bidimensionali*





Ricostruzione 3D mentale con planning bidimensionali





**Perdita ossea (10-20%
del totale artrosi spalla)**

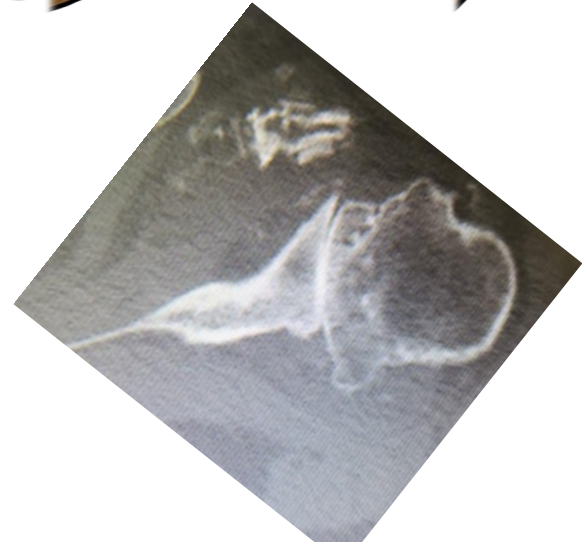
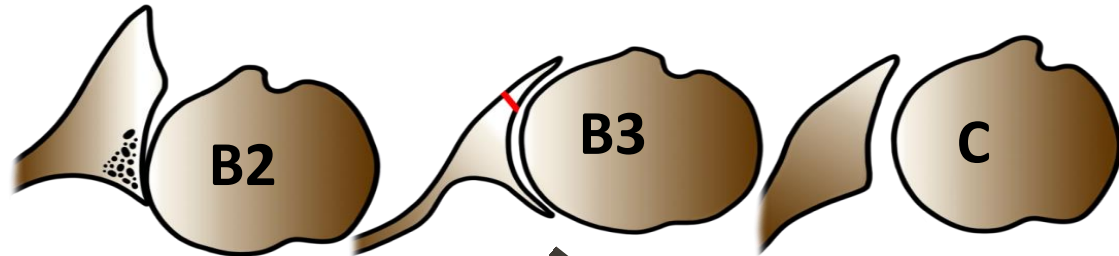


Perdita ossea glenoideia

- Deformità



- Eccessiva Retroversione
(artrosi concentrica)

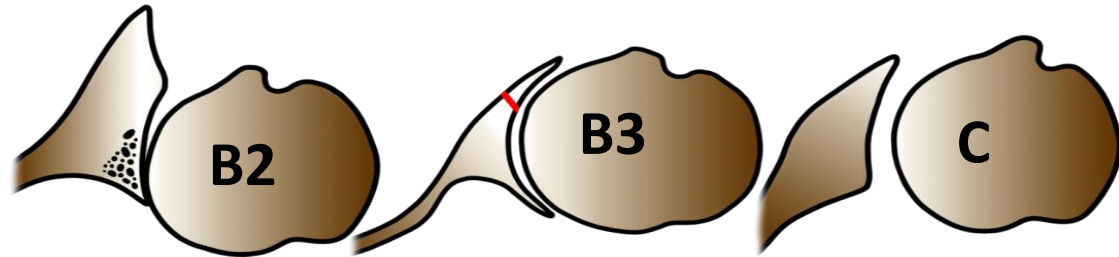


Perdita ossea glenoideea

- **Deformità**



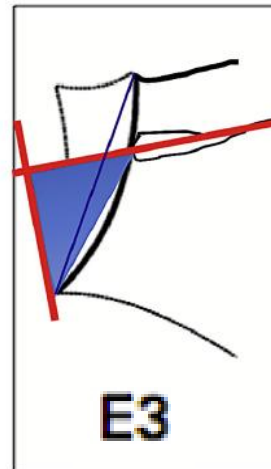
- **Eccessiva Retroversione**



(artrosi concentrica)

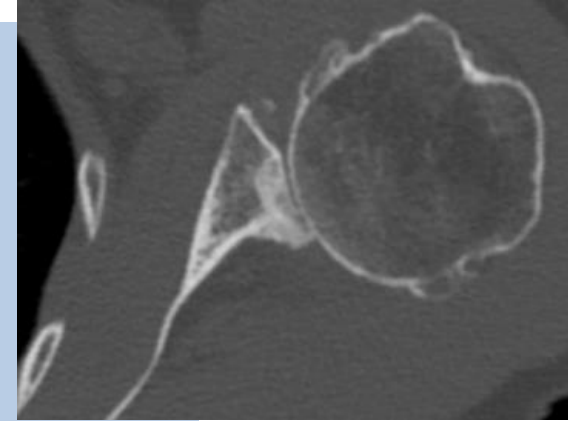
- **Eccessiva inclinazione**

(artrosi eccentrica)



Perché correggere le perdite d'osso glenoidee?

- * Rischio instabilità
- * Rischio “notching”- usura
- * Migliore ROM
- * Migliore tensione parti molli



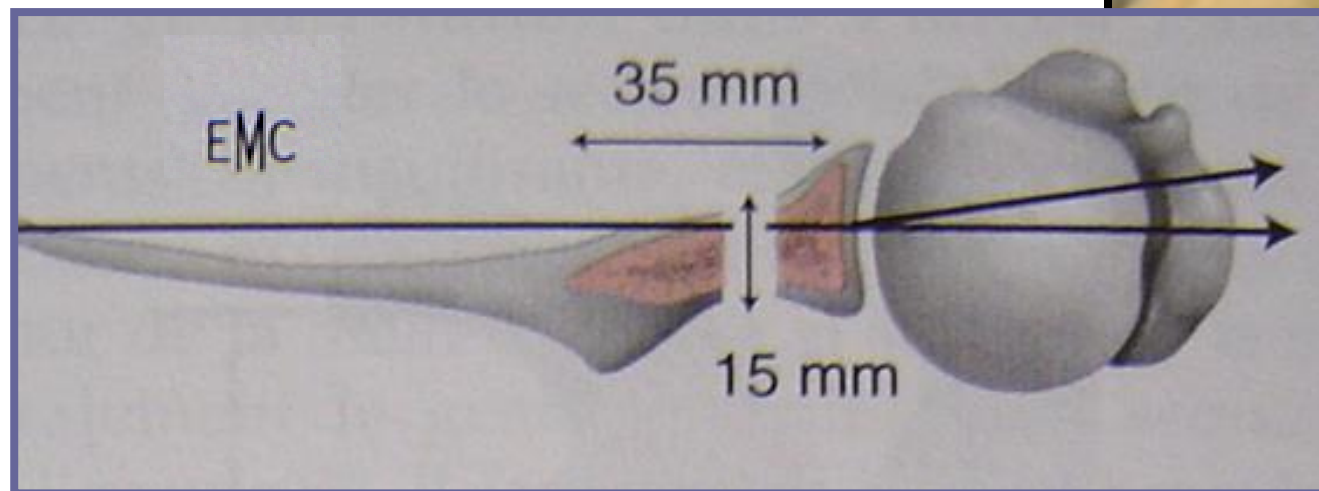
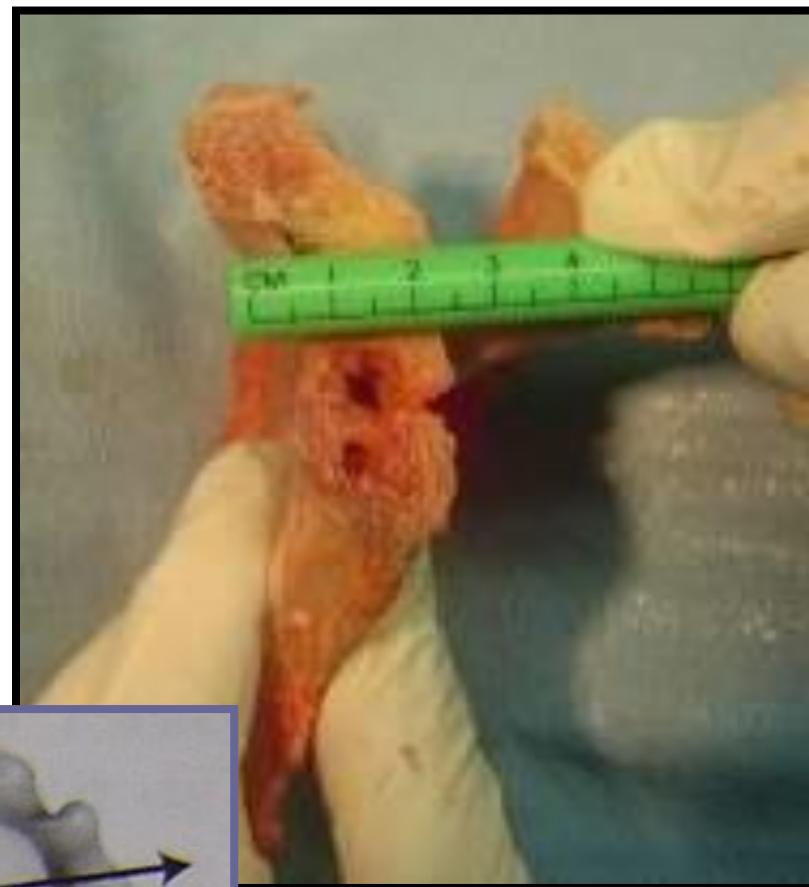
Fattore chiave per successo dell'impianto

Centrare collo glena : DIFFICILE!!



**Colonna portante
per il perno e viti**

Centrare collo glena : DIFFICILE!!



Sistemi Computer Assisted

Esperienza personale

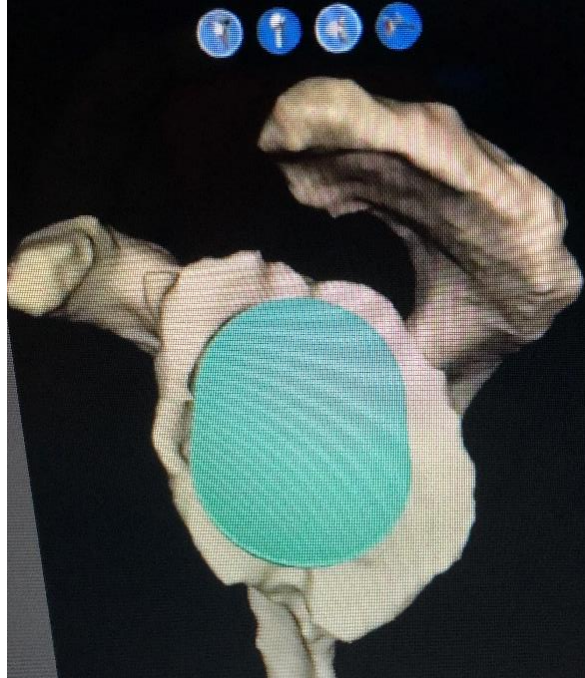
2014

**Patient specific
instrument P.S.I.**



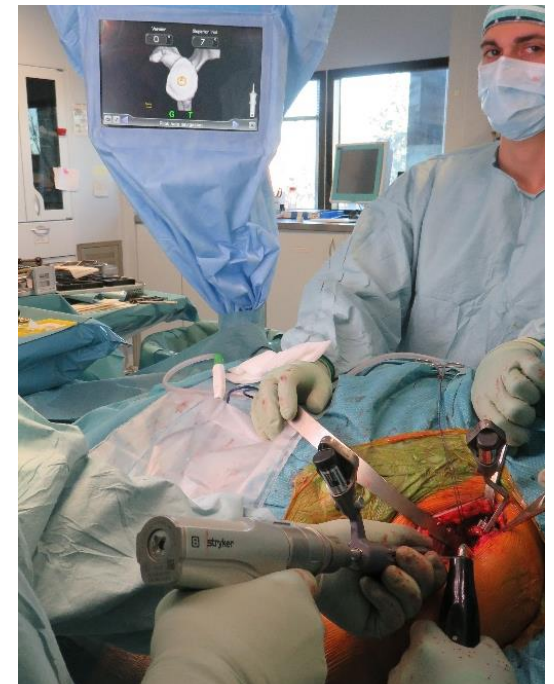
2016

**Simulazione in
3D Pre-op**



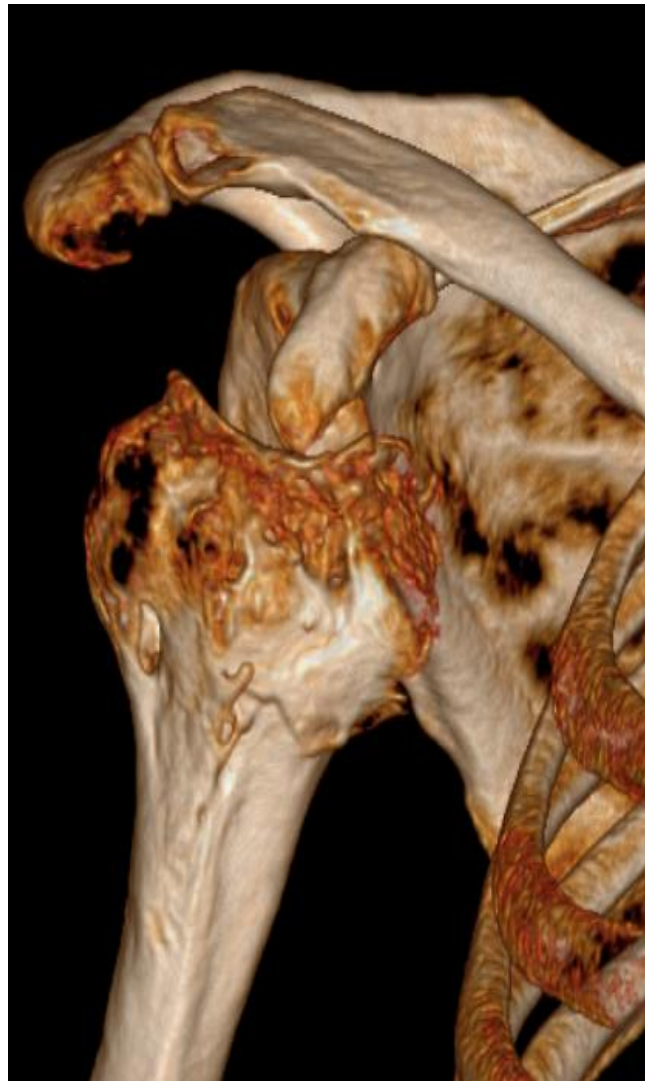
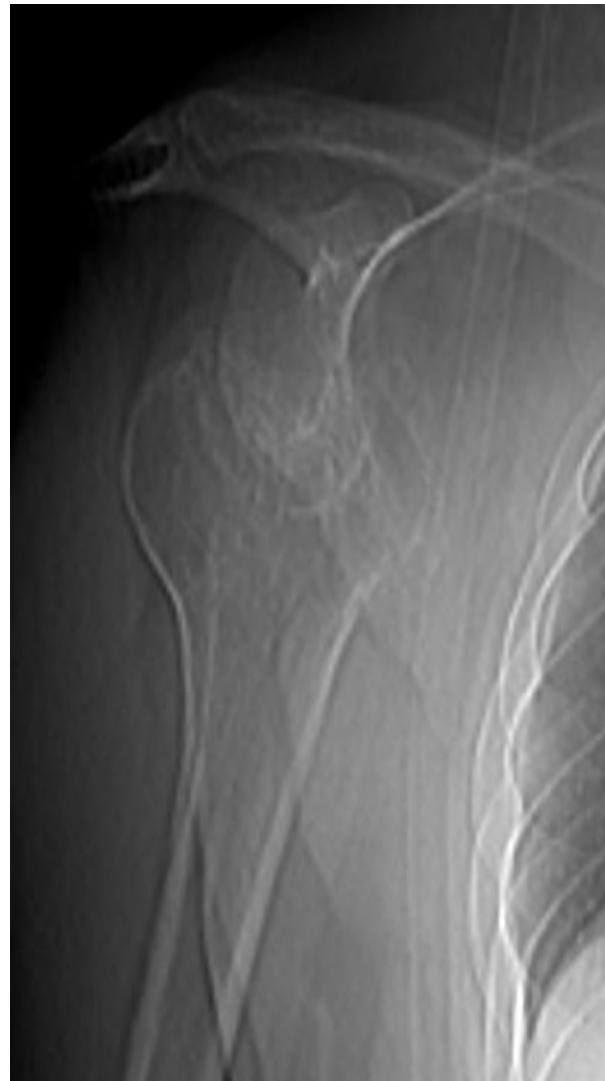
2018

**Studio 3D +
Navigatore GPS**

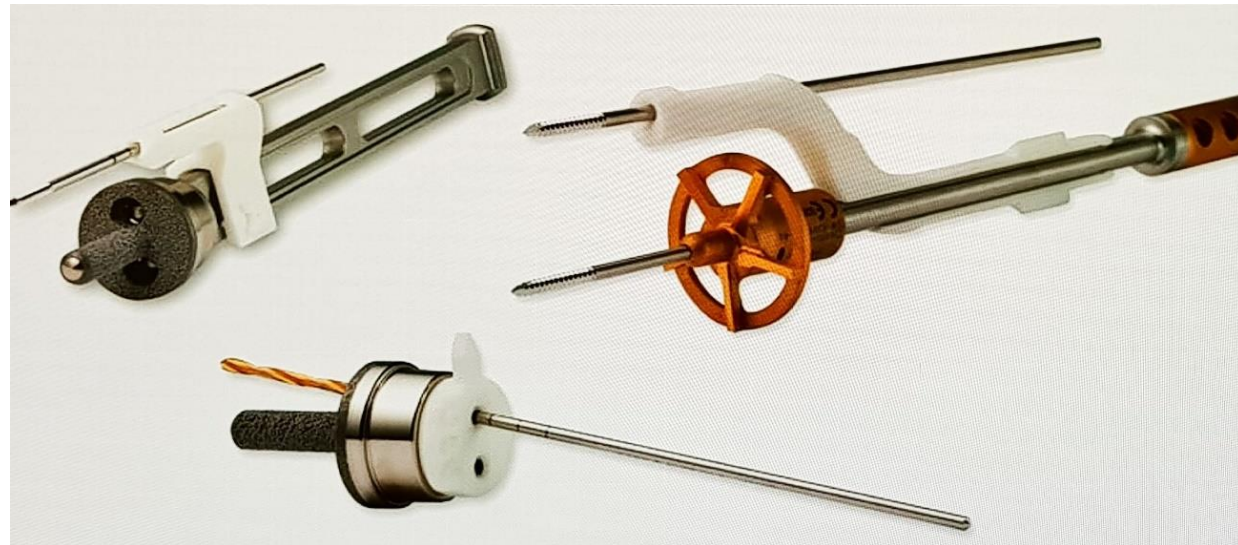
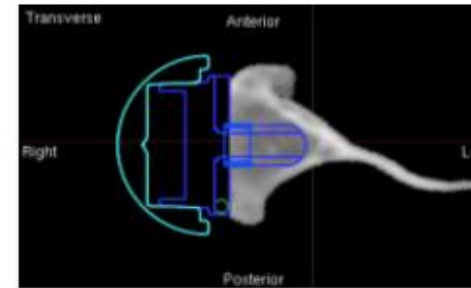
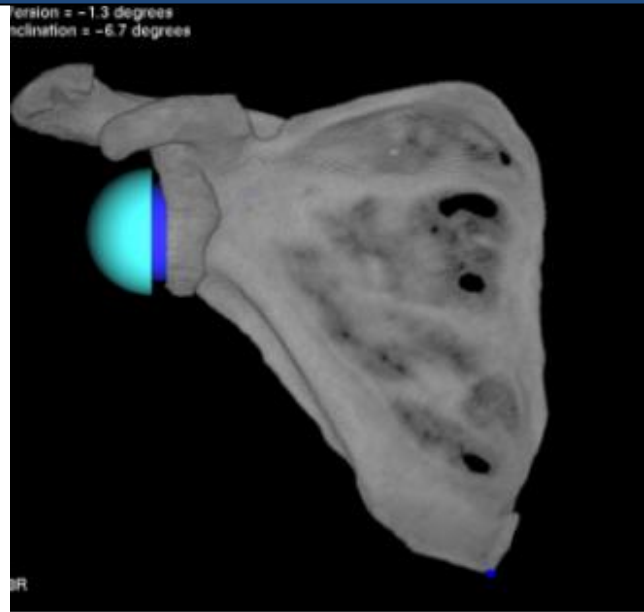
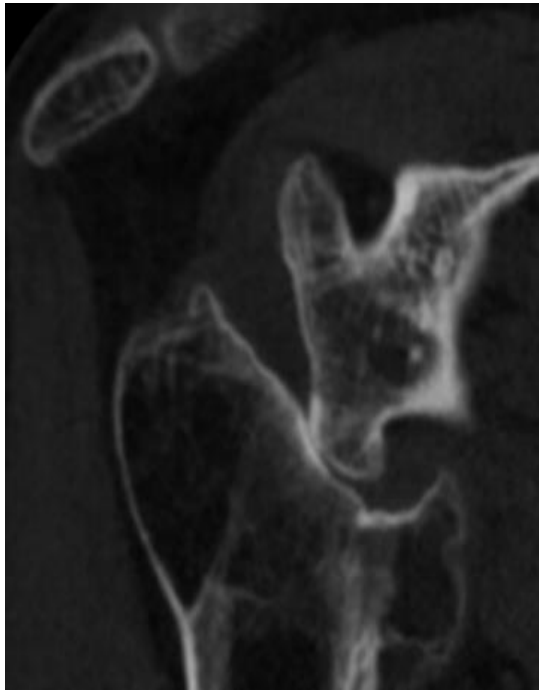


1) METODO P.S.I. (Patient specific instrument)

G.M. 50 a.

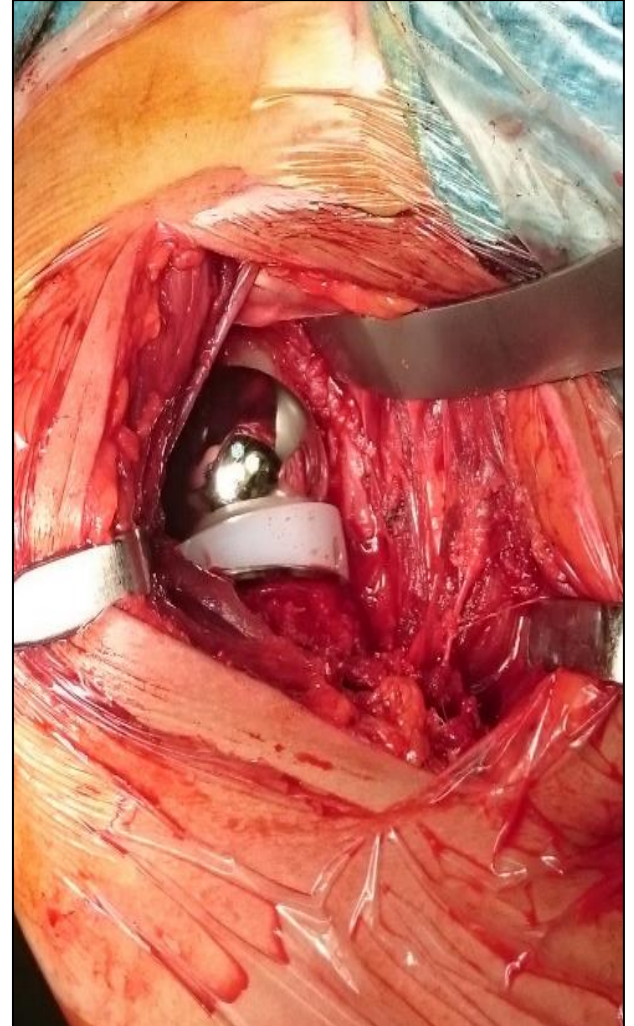
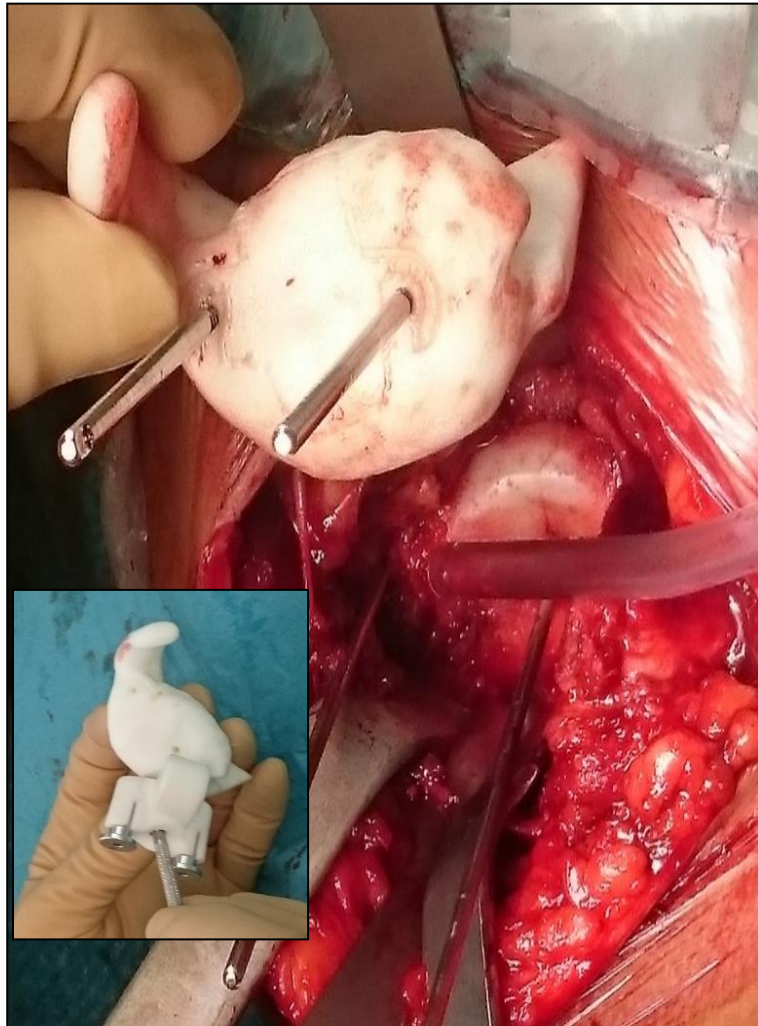


METODO P.S.I. (Patient specific instrument)

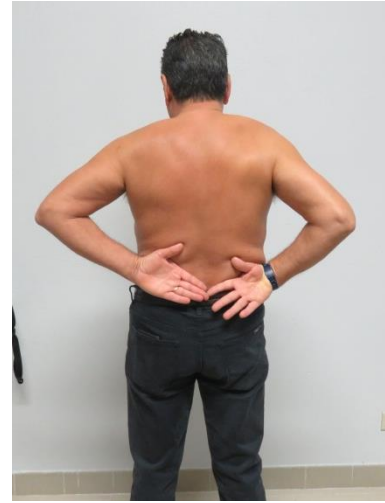


METODO P.S.I. (Patient specific instrument)

2014



METODO P.S.I. (Patient specific instrument)

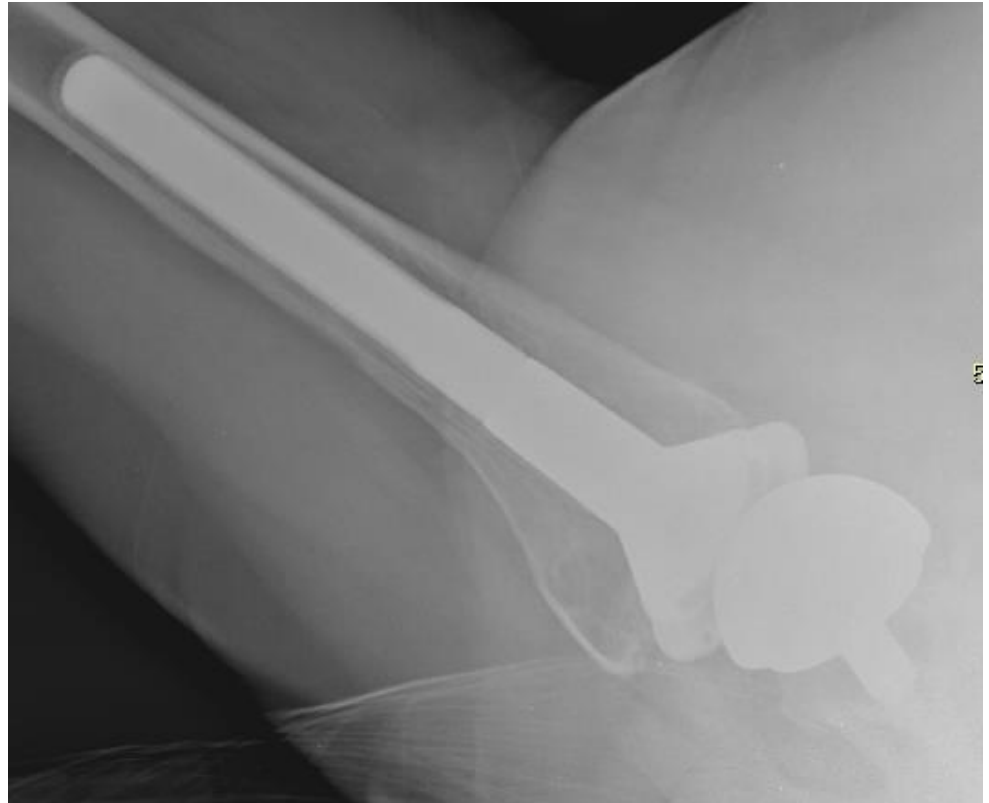


Fu 7 a.

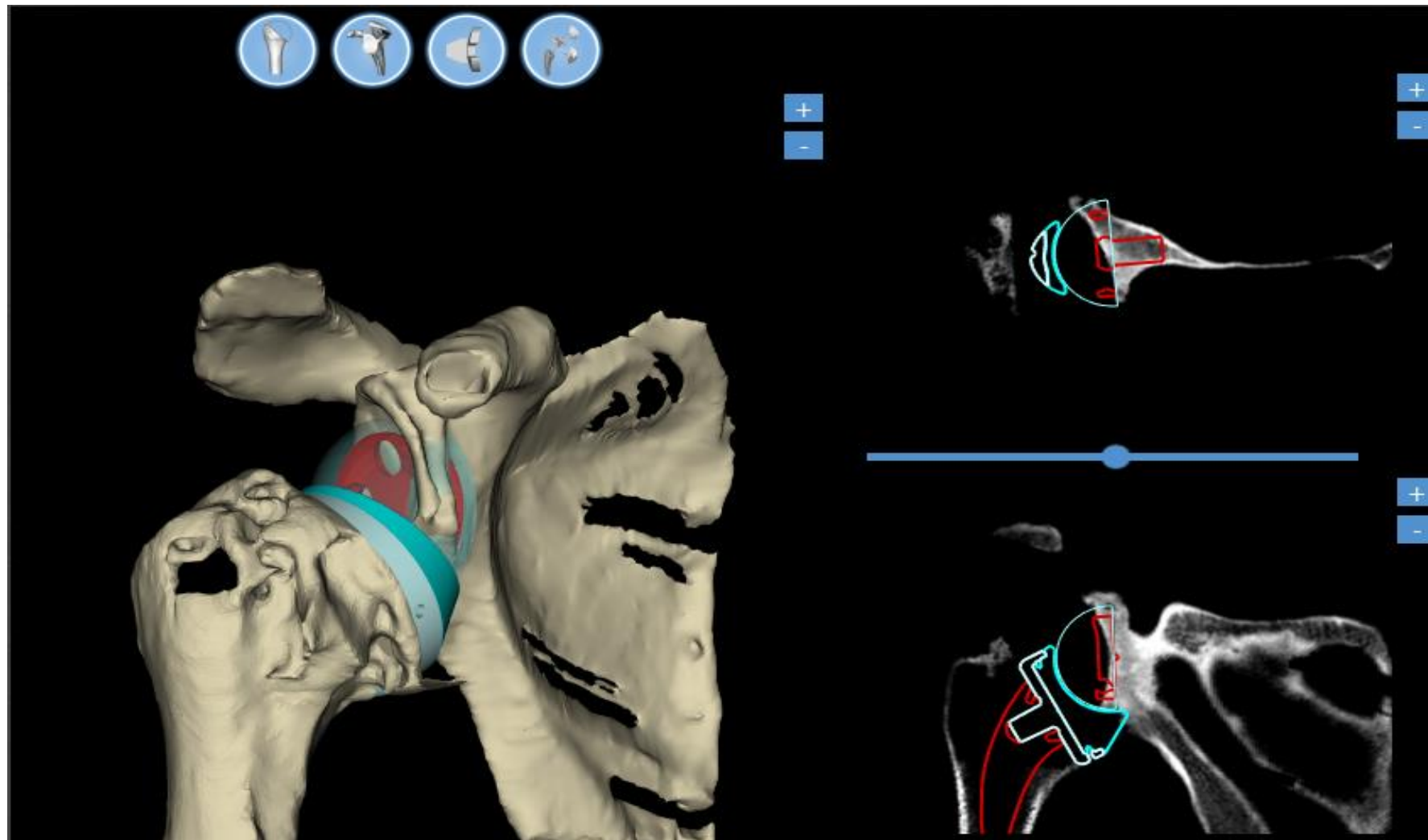
METODO P.S.I. (Patient specific instrument)



Fu 7 a.

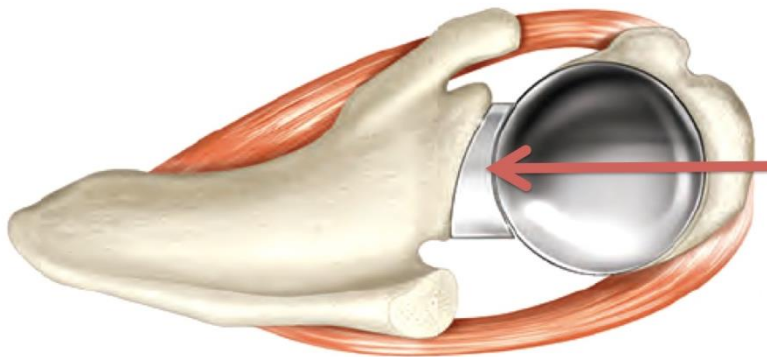
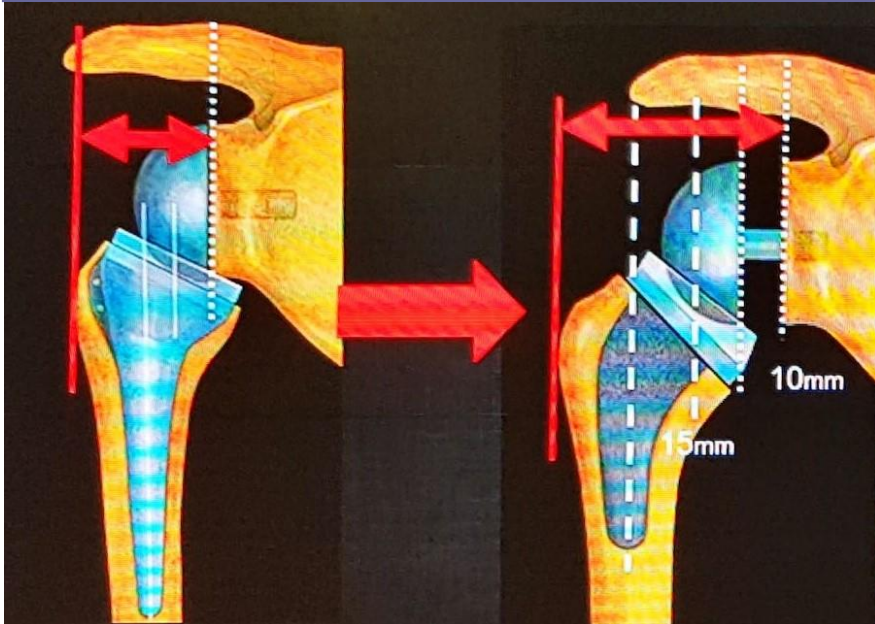


2)METODO Simulazione su computer



METODO Simulazione su computer

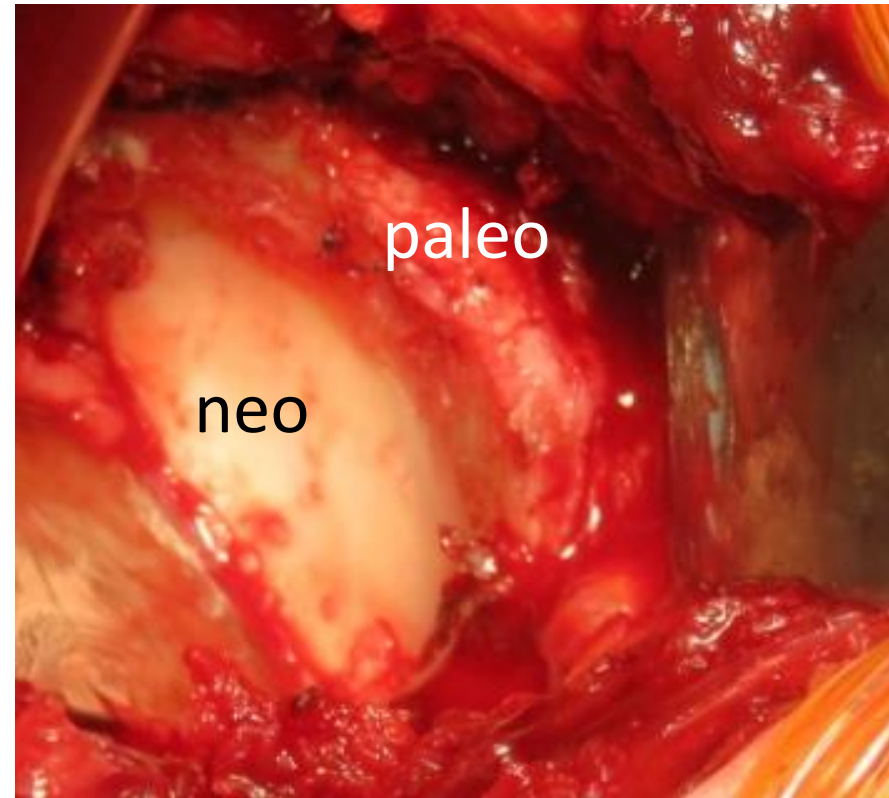
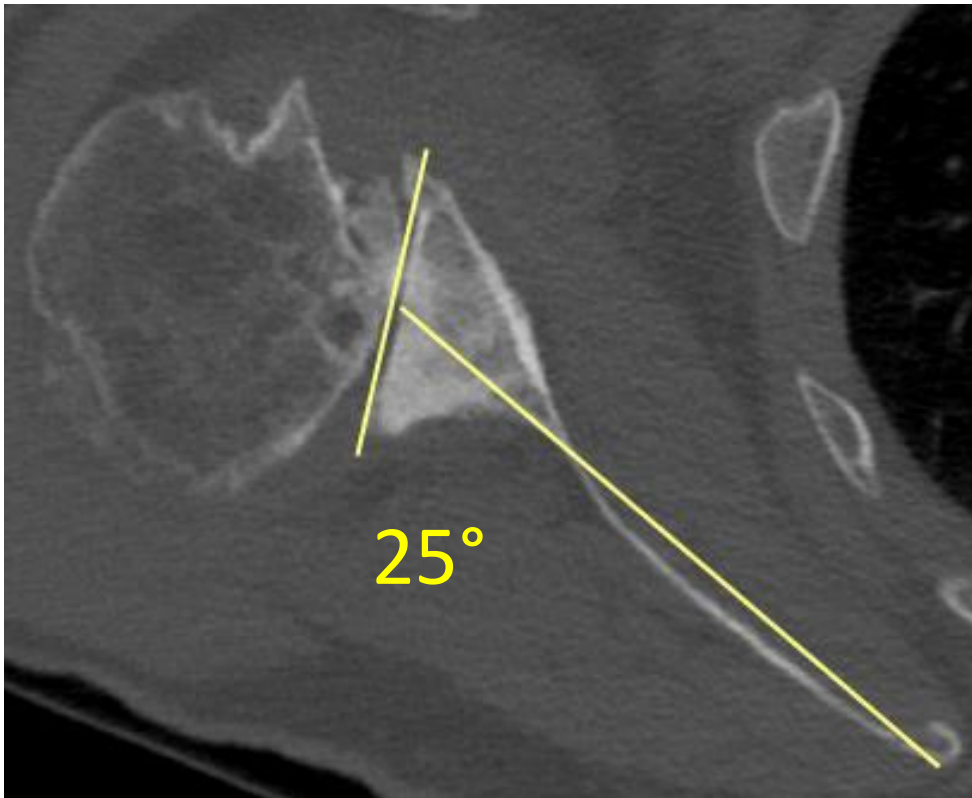
Nuova filosofia : Lateralizzazione dell'Impianto



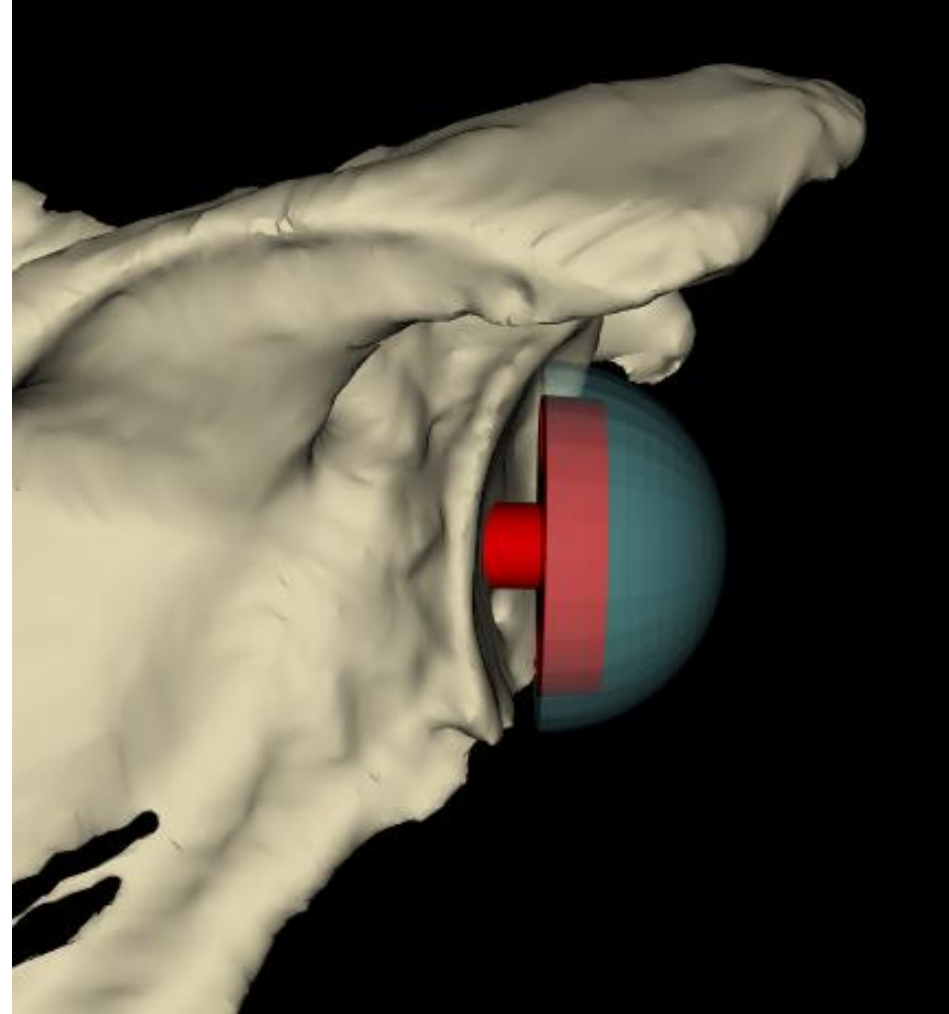
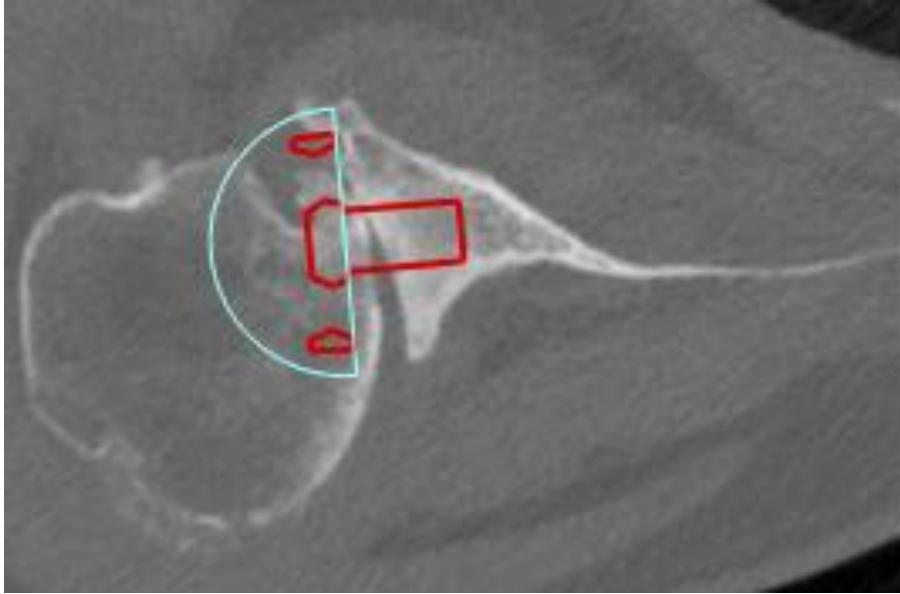
- * **Conserva osso/scapola**
- * **Riduce contatto protesi –scapola**
- * **Aumenta la stabilità**
- * **Migliora movimento**
- * **Aumenta forza cuffia rimanente**

METODO Simulazione su computer

Caso clinico T.R. 54 aa

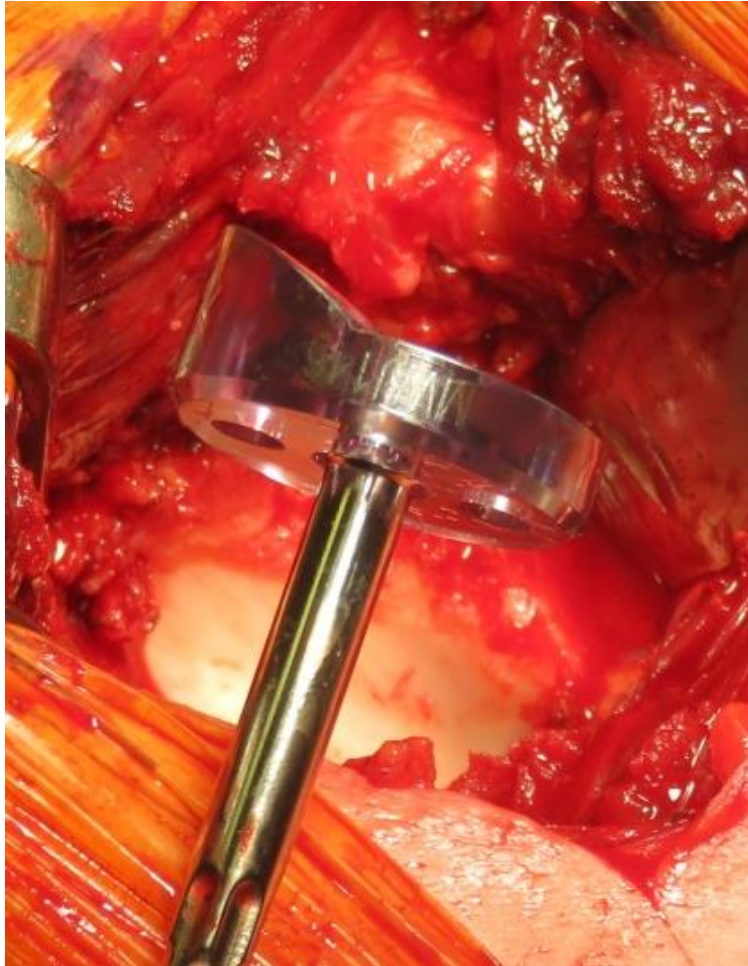


METODO Simulazione su computer

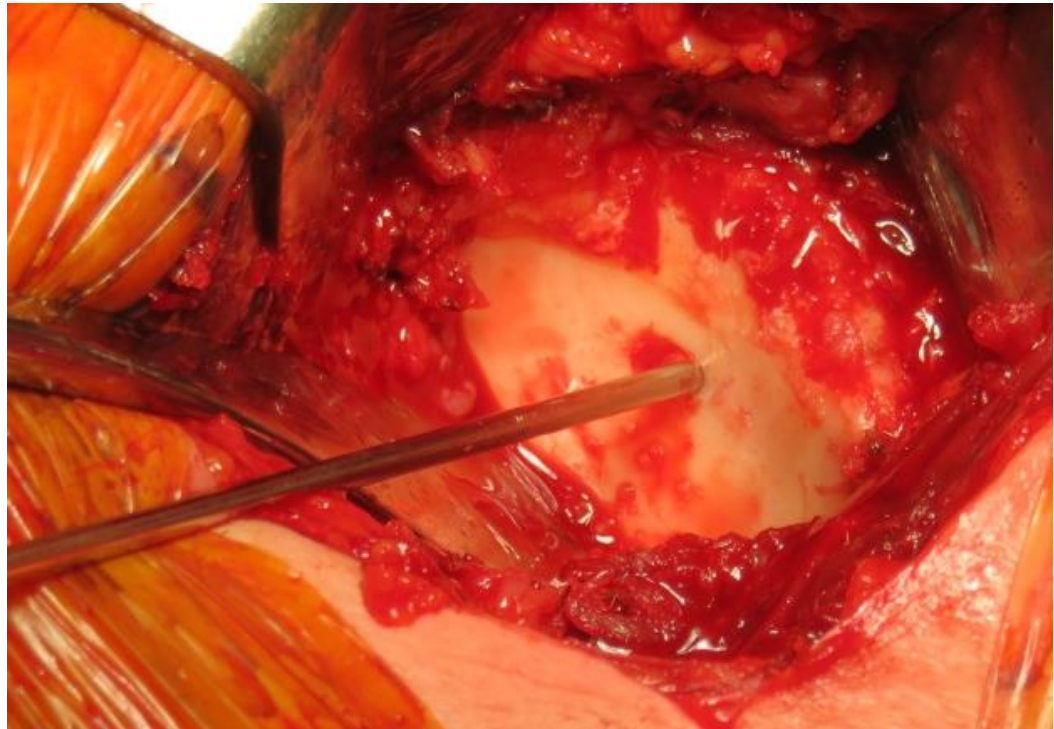


**Valutazione
perdita ossea
posteriore**

METODO Simulazione su computer

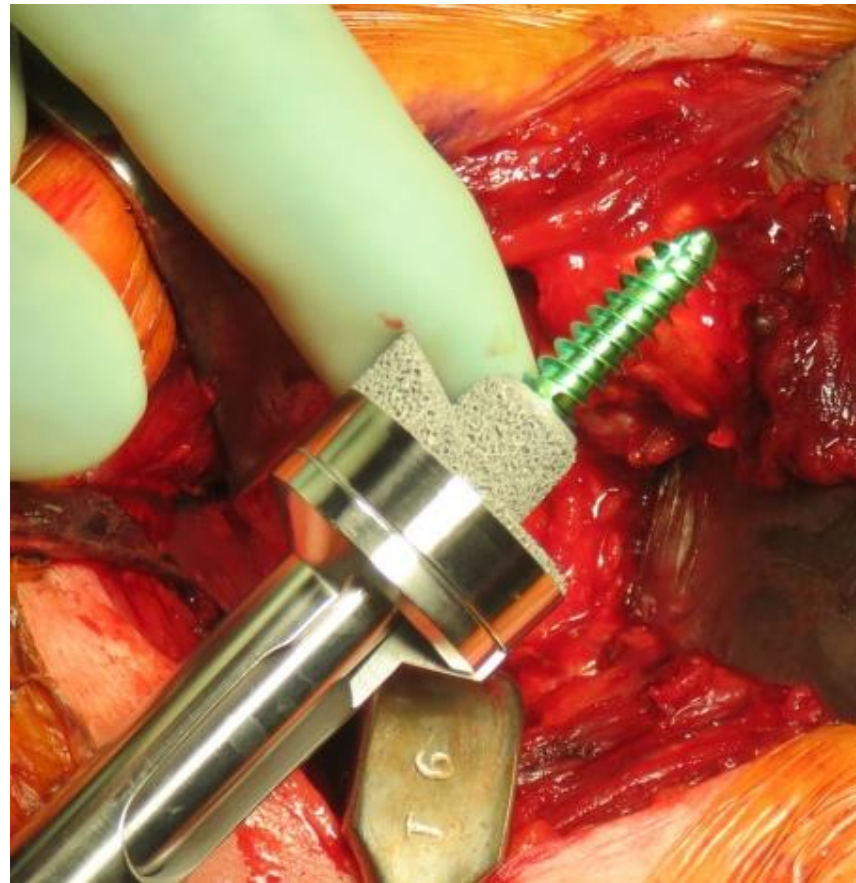
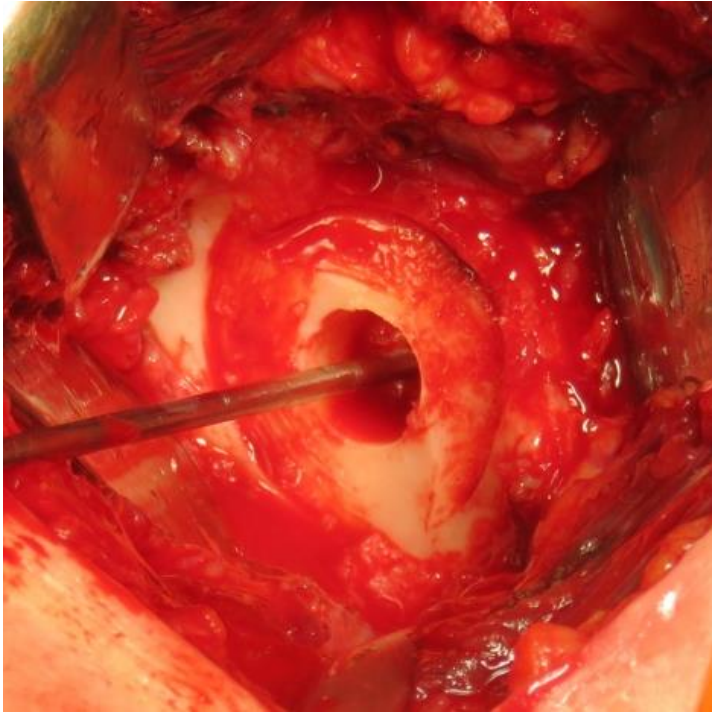


Filo guida «centrato»

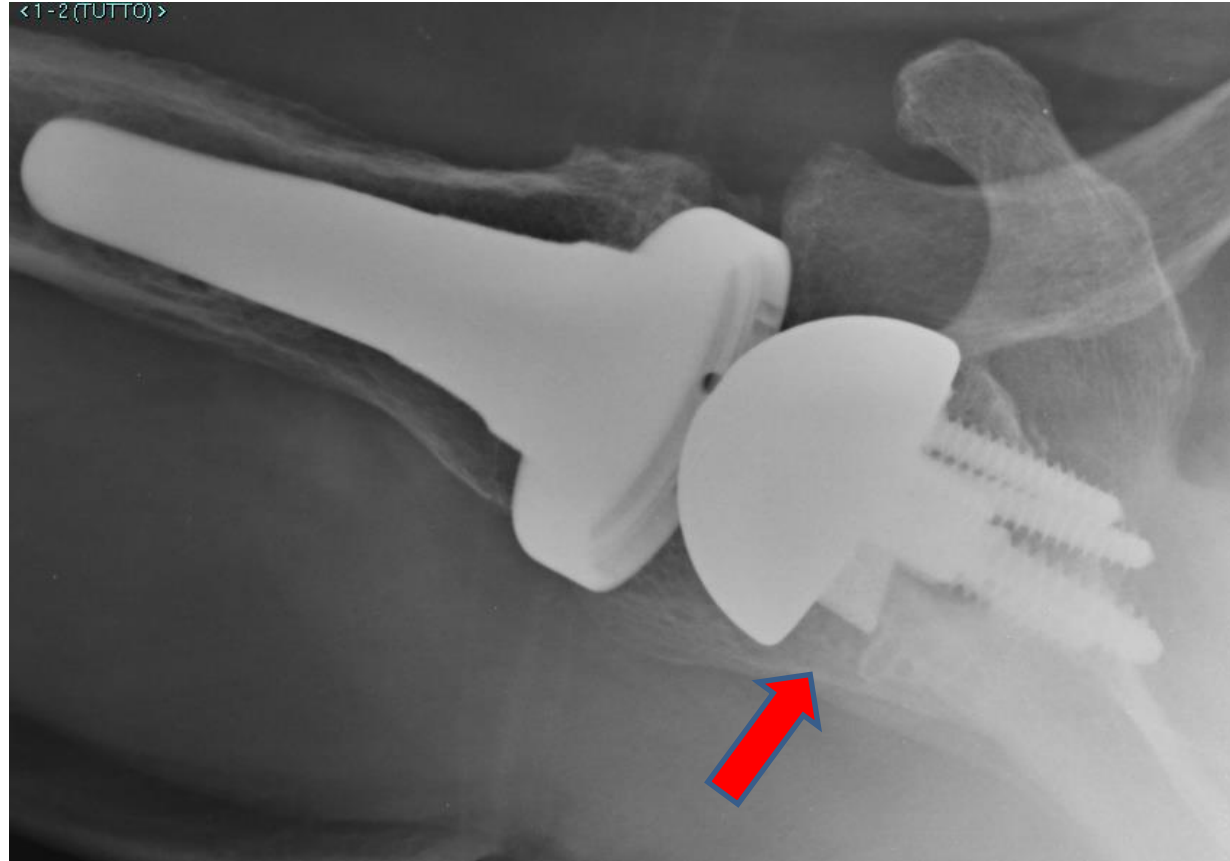


METODO Simulazione su computer

Half wedge e vite

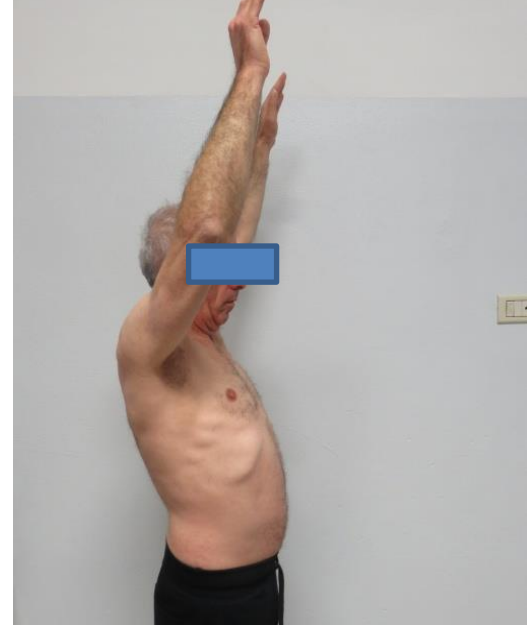


METODO Simulazione su computer



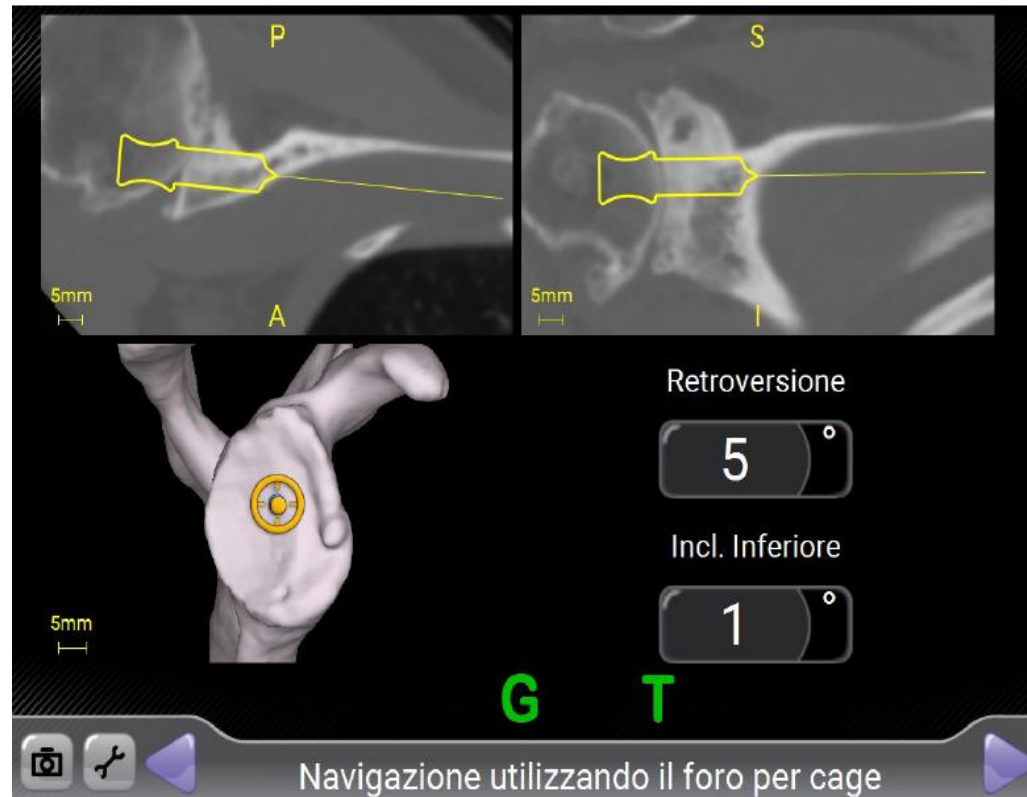
RX dopo 2 a.

METODO Simulazione su computer



f.u.
4 a.

3) METODO Navigatore GPS



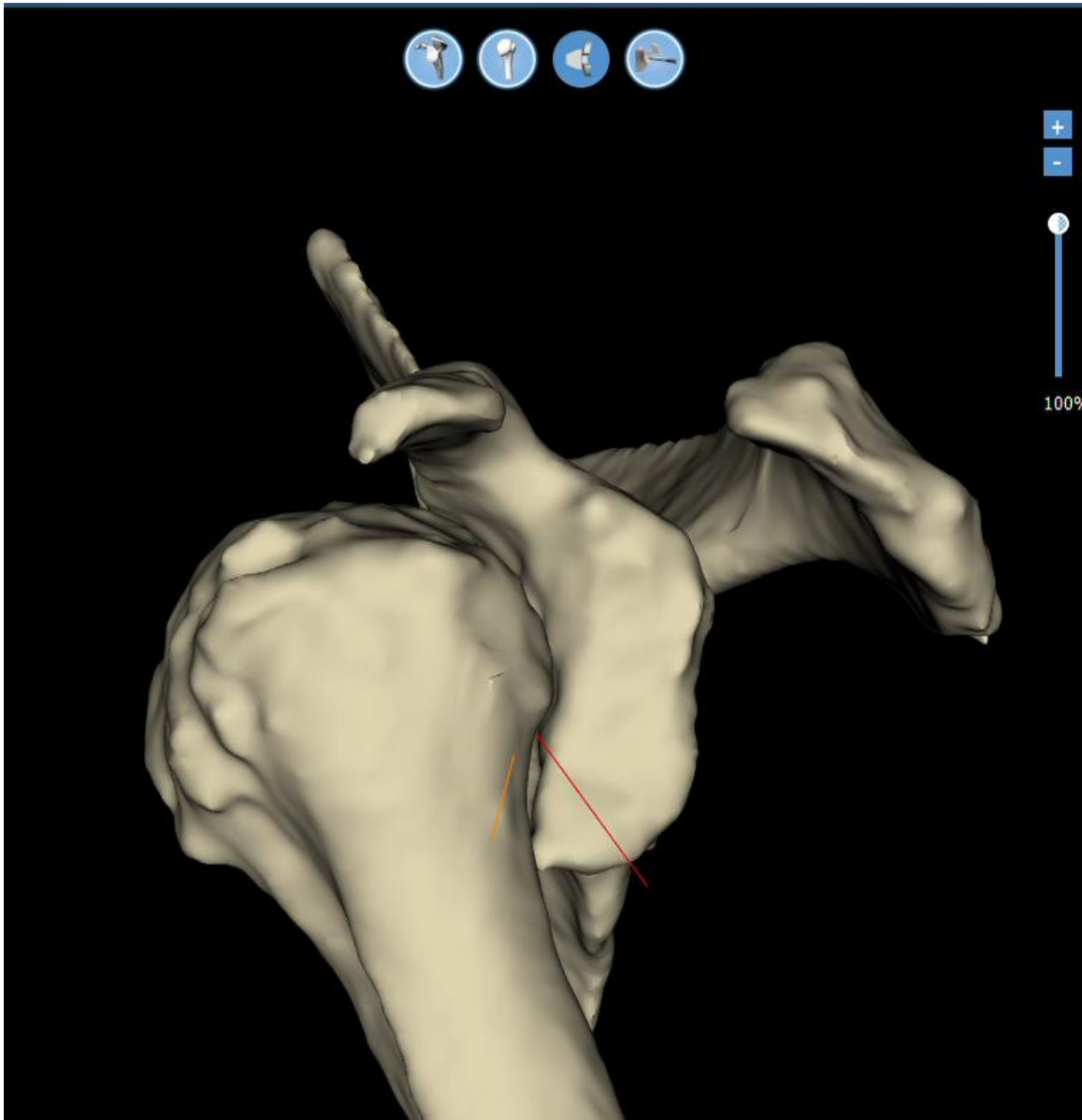
Cassazione: quando il medico commette reato nel prescrivere le radiografie



MEDLEX | REDAZIONE DOTNET |

02/10/2022 20:48

La Suprema Corte con la sent. n. 36820 del 29 settembre 2022 afferma che di alcuni trattamenti medici, soprattutto se potenzialmente pericolosi per la salute, non bisogna fare un uso disinvolto



Glenoid
Humerus
Joint

Procedure

Reverse

Implant

PERFORM Reversed

Implant Screws

Base Plate

Type Standard

Diameter 25 mm

Offset 0 mm

Fixation Central Screw

Graft

Type No Graft

Central Screw

Diameter 6.5 mm

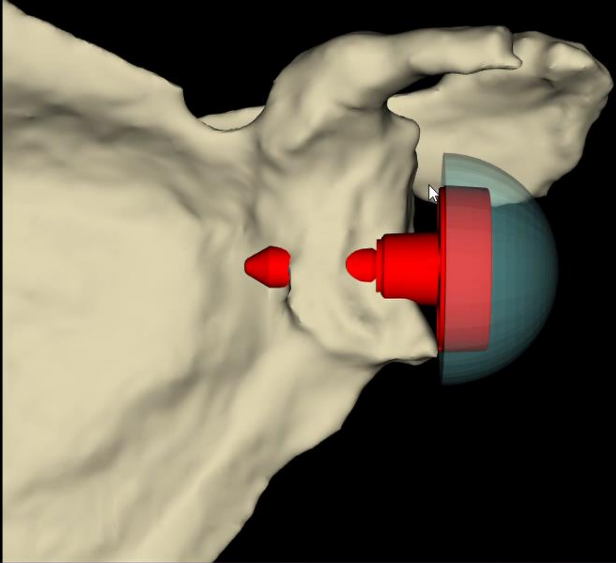
Length 30 mm

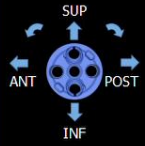
Glenosphere

Diameter 36 mm

Type Centered

Reset implant





Version

ANT 0°

POST

Lateralization

MED 5.0 mm

LAT

Screw Depth

20 mm

Seating

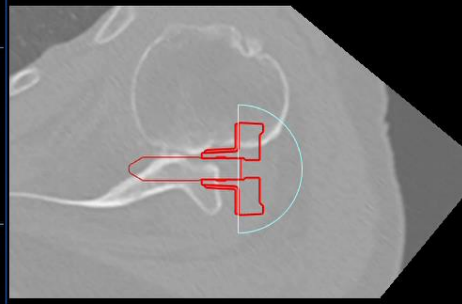
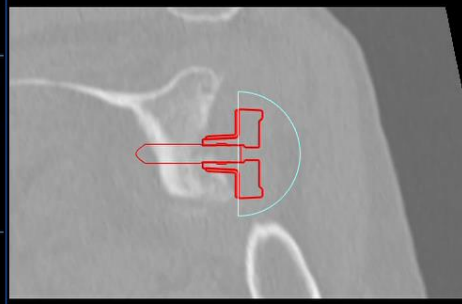
3 %


■ Cortical

■ Cancellous

■ No seating

RSA
Soft-Tissue
Sagittal



Engineered with
IMASCAP™ Technology

SOLIDA, EMILIA - E425OL

Female, 80 Years Old

Left Shoulder

Diagnosis Instability Arthropathy

Glenoid Type Not Specified

Prior Surgeries Not Specified

Glenoid anteversion 70°

Glenoid inclination inf 39°

RSA angle -2°

Posterior humerus subluxation 0 %

Save Progress

Finalize Plan

IMPIANTO A RISCHIO DI INSTABILITA'!

P.F. 16 a. Malunione 3 pregressa chirurgia

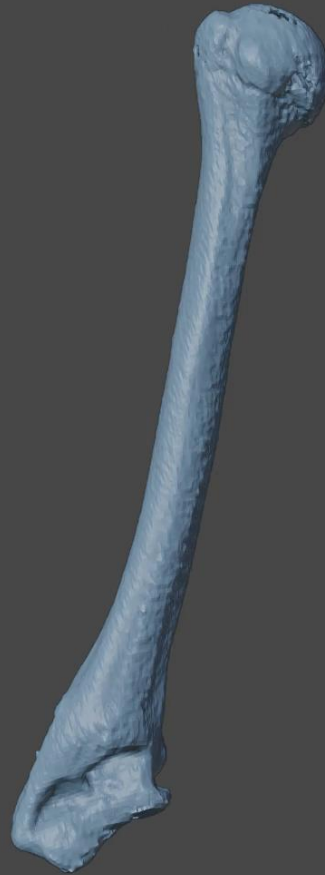
ARTO SUPERIORE



P.F. a 16 Preoperatorio

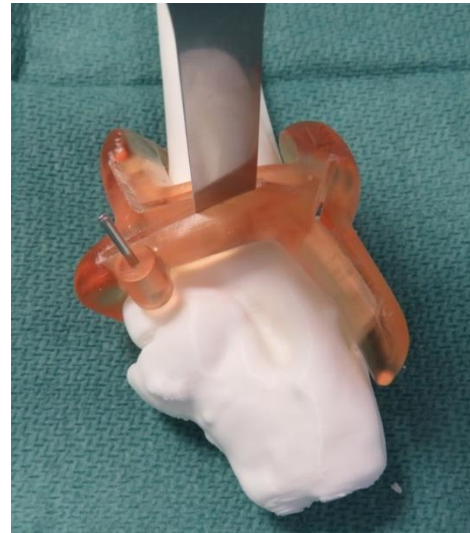
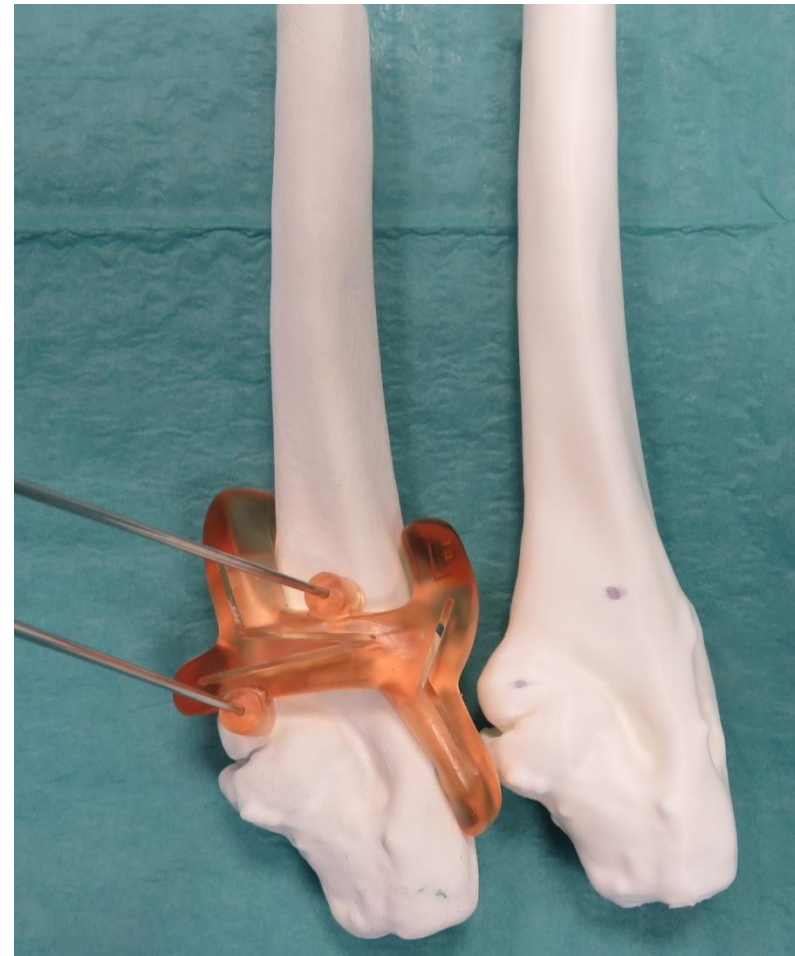


Simulazione osteotomia correttiva



Pianificazione Computer assisted Stampa 3D

Prove pre-op

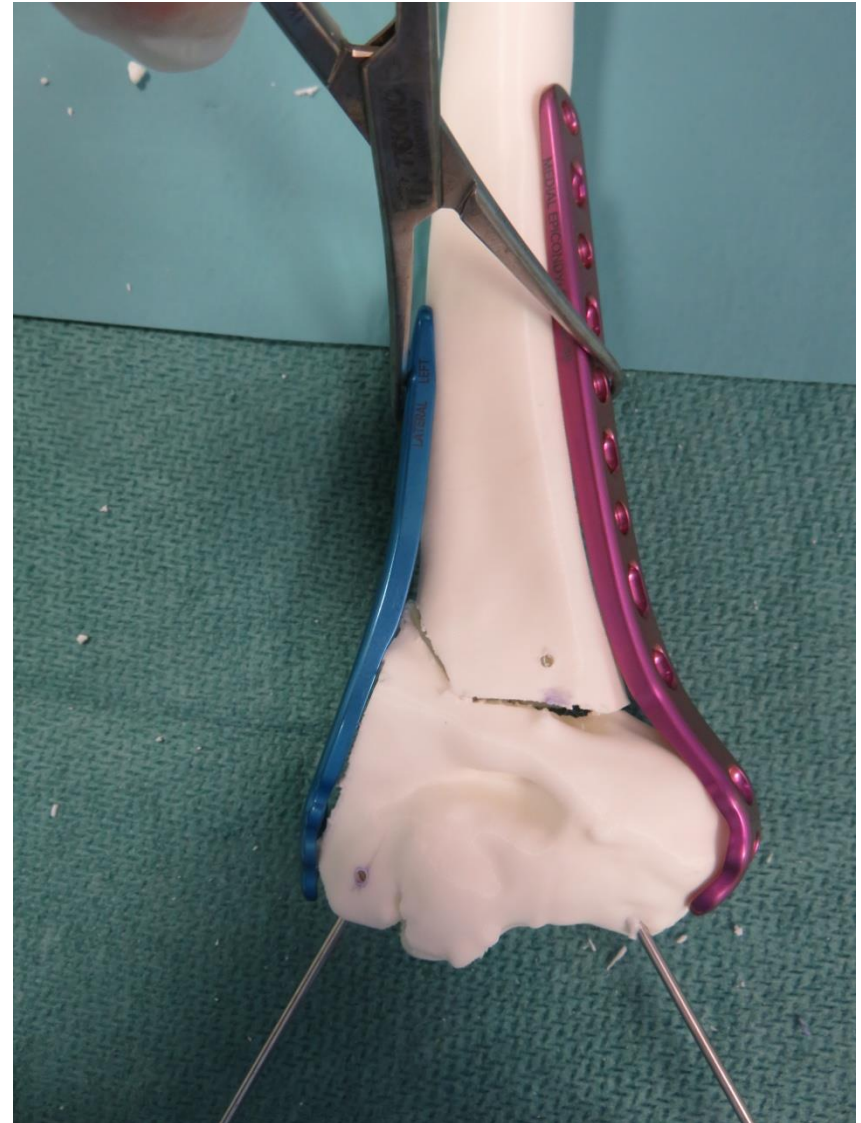


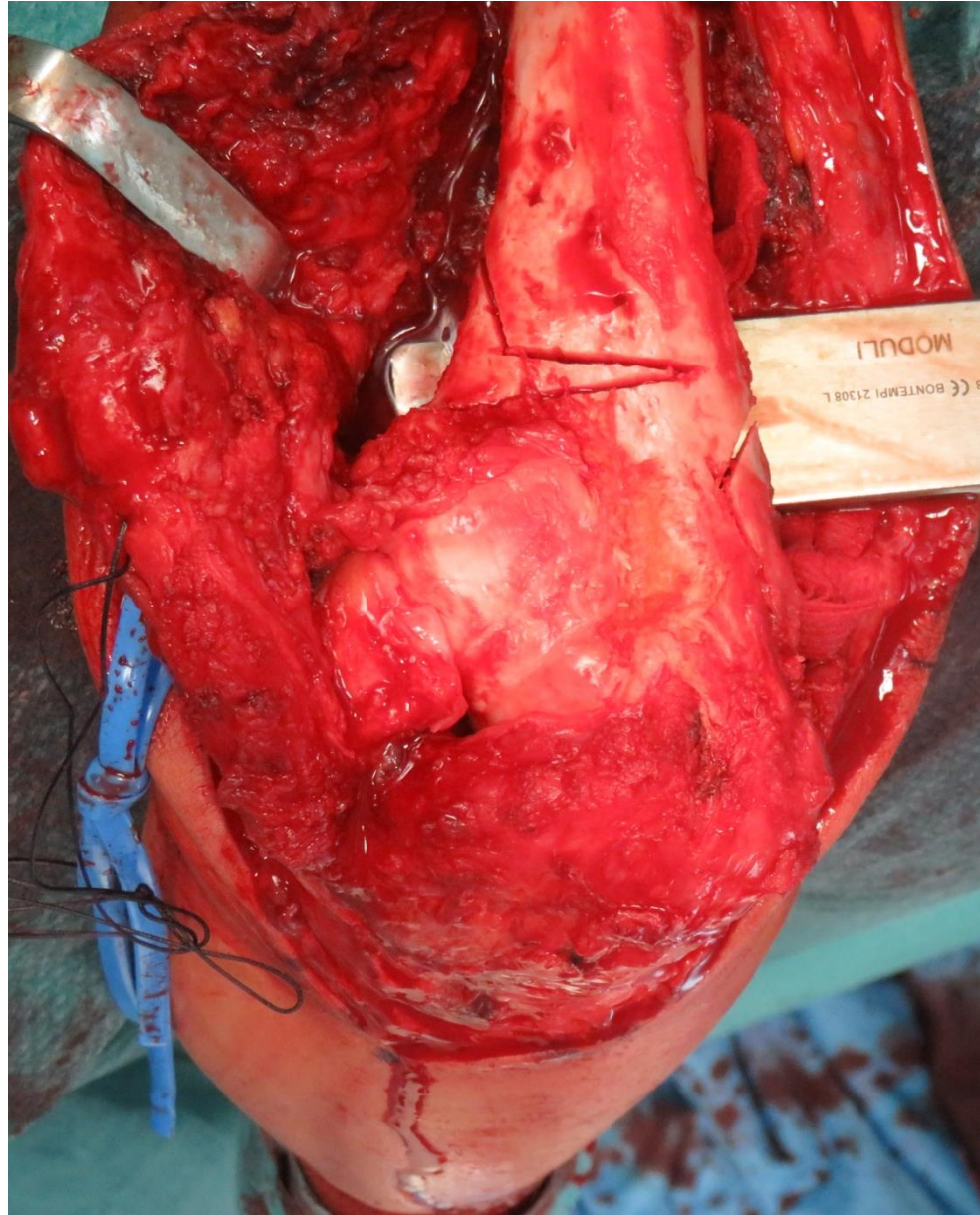
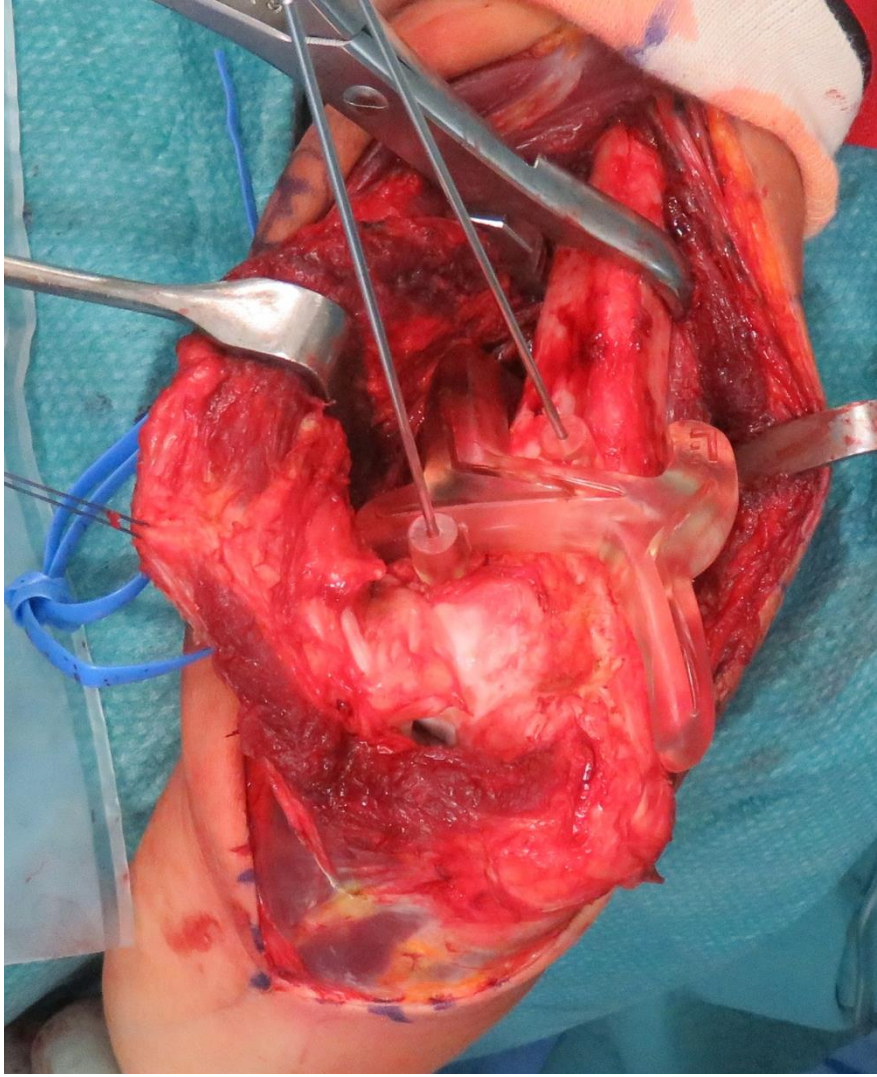
Pianificazione Computer assisted Stampa 3D



3 step preop.

- *Tac bilaterale
- *Guide di taglio
- *Simulazione su modello 3D





RX ad 1 anno

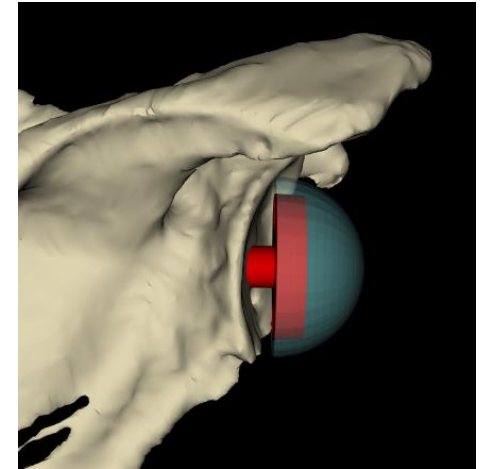


F.U. 22 mesi in attesa rimozione M.D.S.



Conclusione :Sistemi computer assisted

- * Utili in casi di perdita ossea
- * Esistono diverse soluzioni
- * Necessaria curva di apprendimento per ridurre rischi di cattiva utilizzazione
- * Aumento costi (Contenuto)
- * Facilita al chirurgo ricostruzione mentale 3D

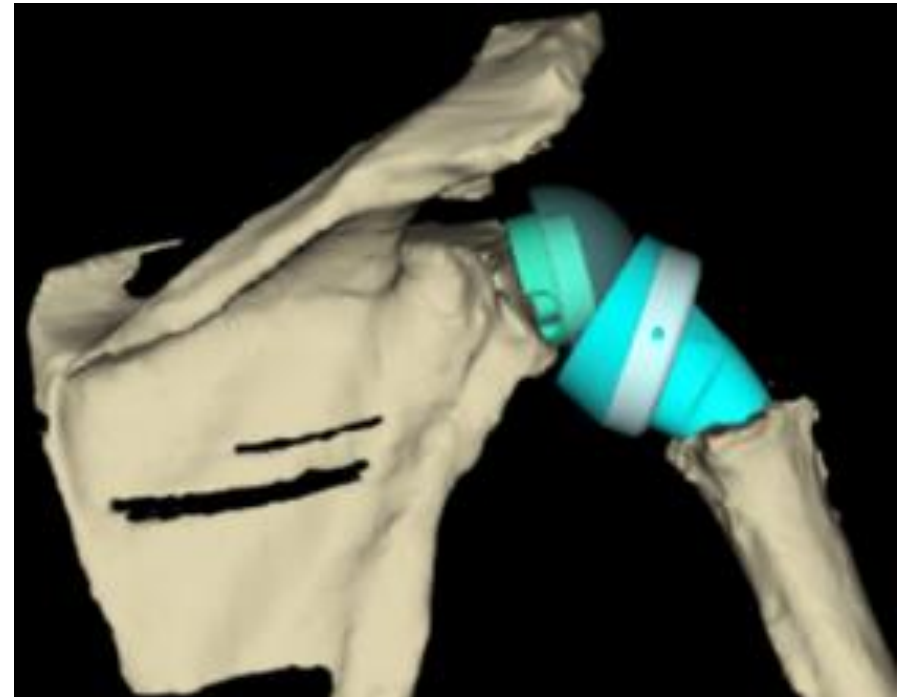
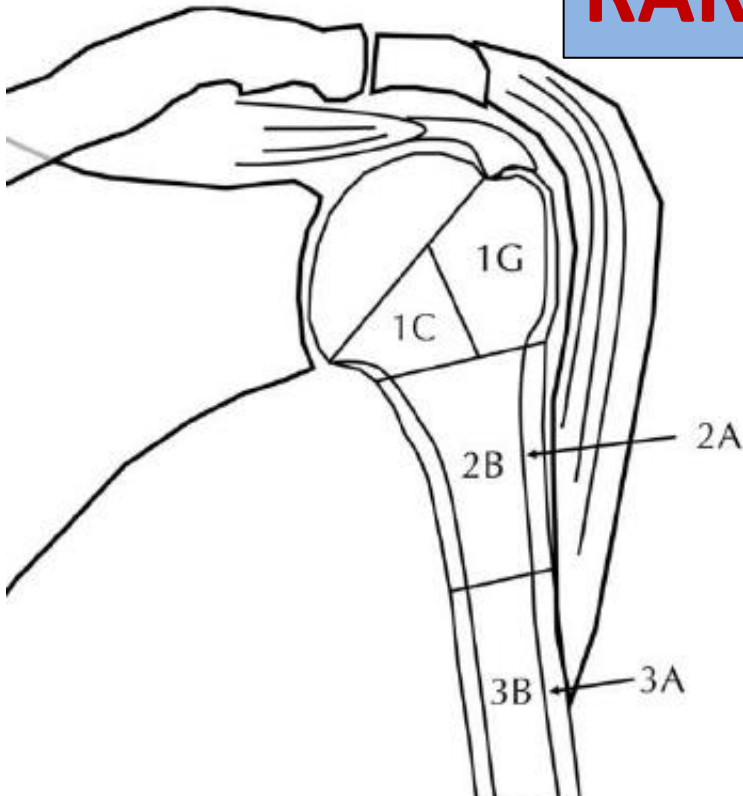






Perdita ossea omerale

RARA



CHIRURGIA DI REVISIONE

Humeral Bone Loss in Revision Total Shoulder Arthroplasty: the Proximal Humeral Arthroplasty Revision Osseous inSufficiency (PHAROS) Classification System

Peter N. Chalmers MD, Anthony A. Romeo MD, Gregory P. Nicholson MD, Pascal Boileau MD, PhD, Jay D. Keener MD, James M. Gregory MD, Dane H. Salazar MD, Robert Z. Tashjian MD