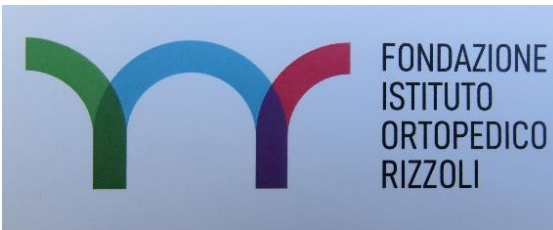


THERMAE
DI SALSOMAGGIORE

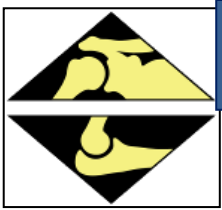


*Elaborazione di un
planning chirurgico
ottimale in casi
complessi: **il parere
del chirurgo***

R. Rotini
Bologna



FONDAZIONE
ISTITUTO
ORTOPEDICO
RIZZOLI



THERMAE
DI SALSOMAGGIORE



CASO COMPLESSO IN ORTOPEDIA

- * Esperienza del singolo chirurgo***
- * Conoscenza dello strumentario***
- * Deformità e perdita ossea***

**FONDAMENTALE L' AIUTO DEL
PLANNING PREOPERATORIO**

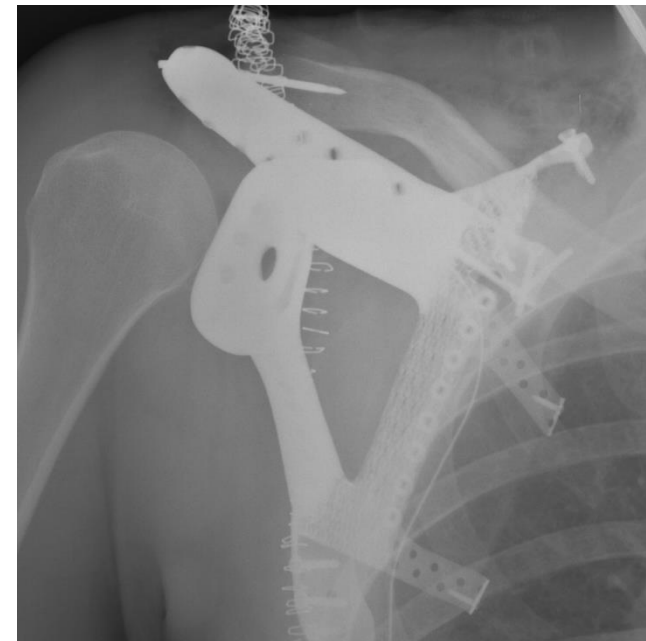


THERMAE
DI SALSOMAGGIORE



CASI COMPLESSI

- * Chirurgia Oncologica***
- * Chirurgia sostitutiva protesica***
- * Chirurgia correttiva nelle deformità ossee***



Gentile concessione Dr. Bianchi Giuseppe

Casi complessi nella Protesica Spalla

Esperienza personale

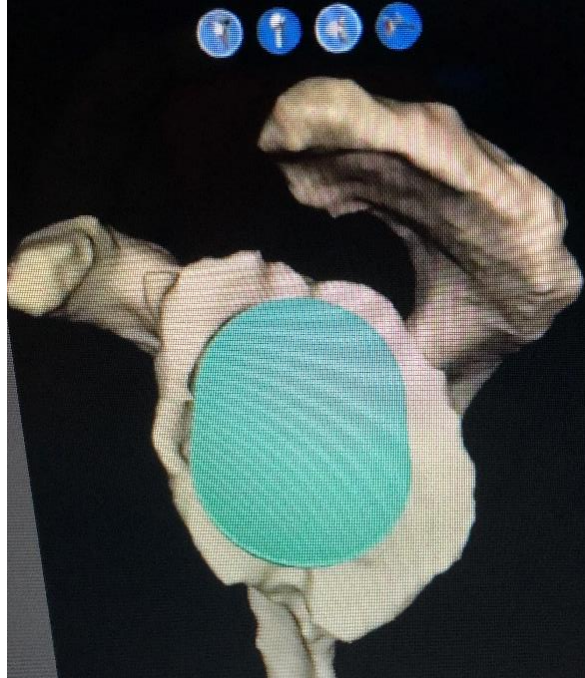
2014

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



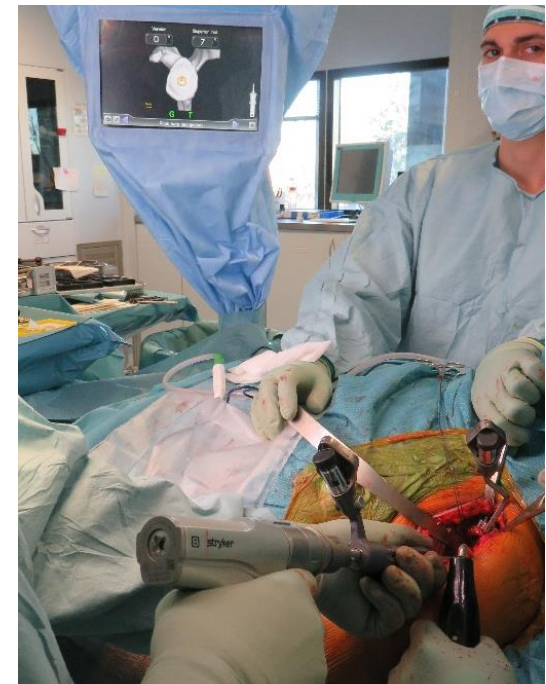
2016

**Simulazione in
3D Pre-op**

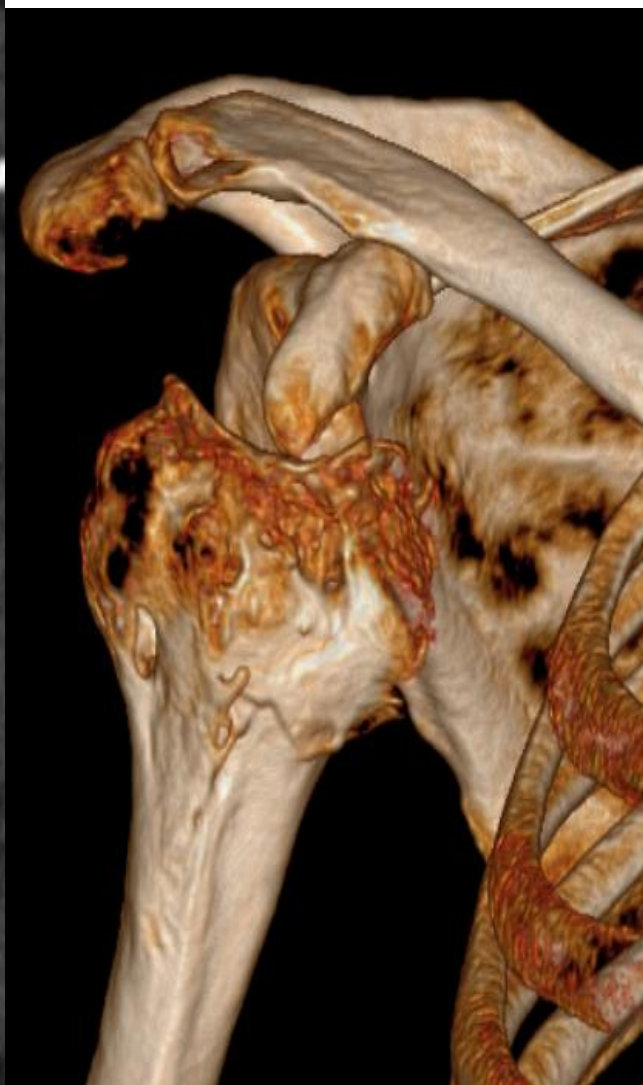


2018

**Studio 3D +
Navigatore GPS**



1) METODO P.S.I. (2014)

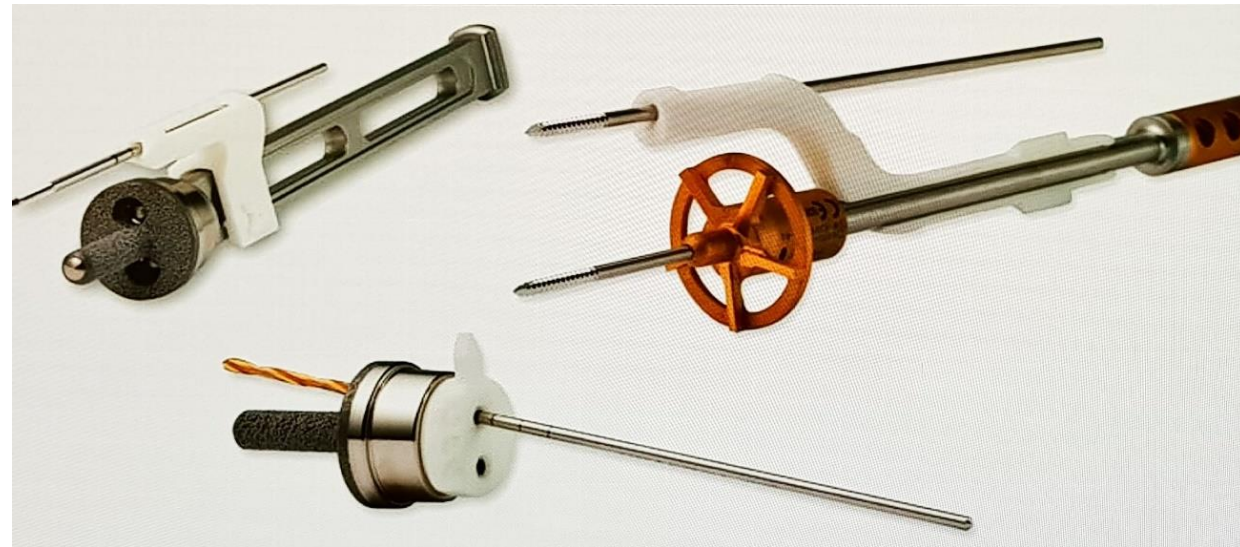
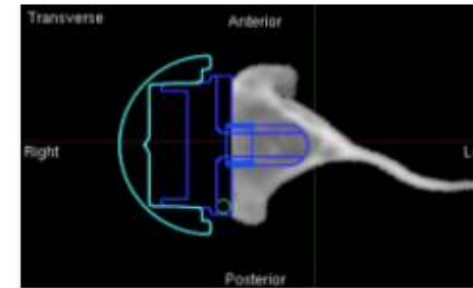
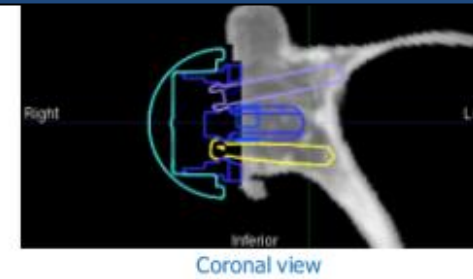
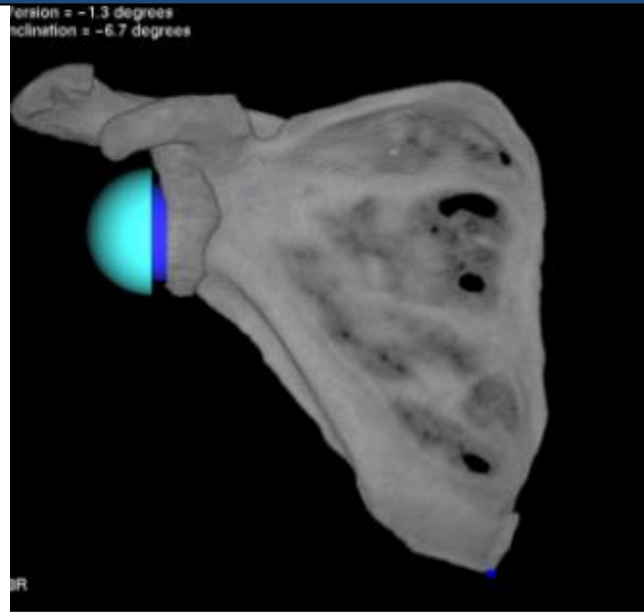
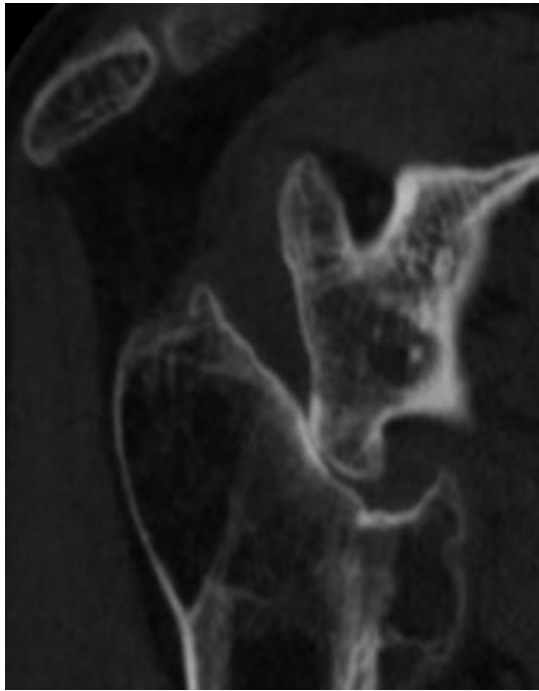


G.M. 50 a.

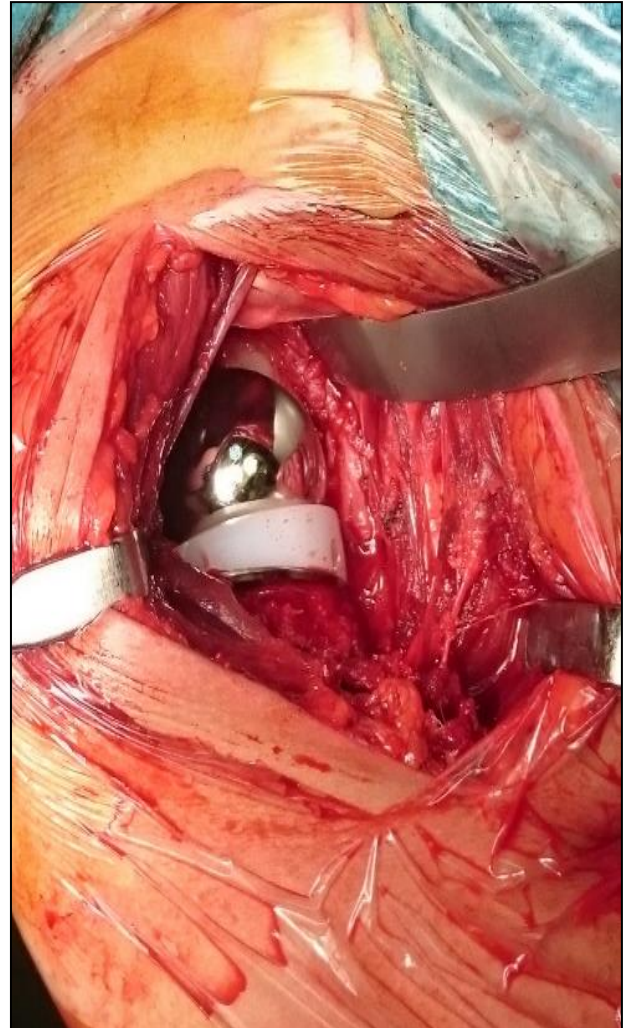
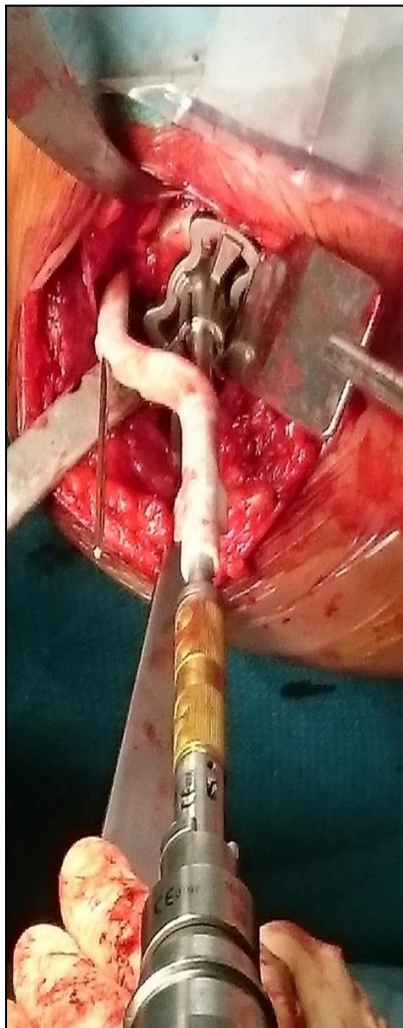
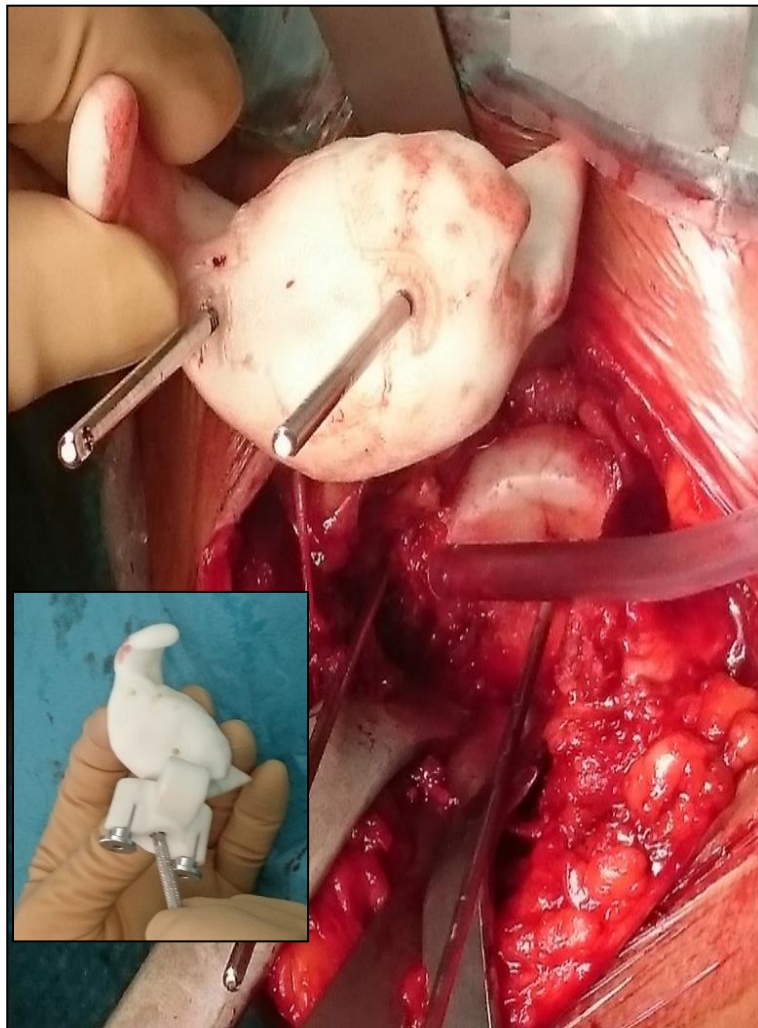


2014

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



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

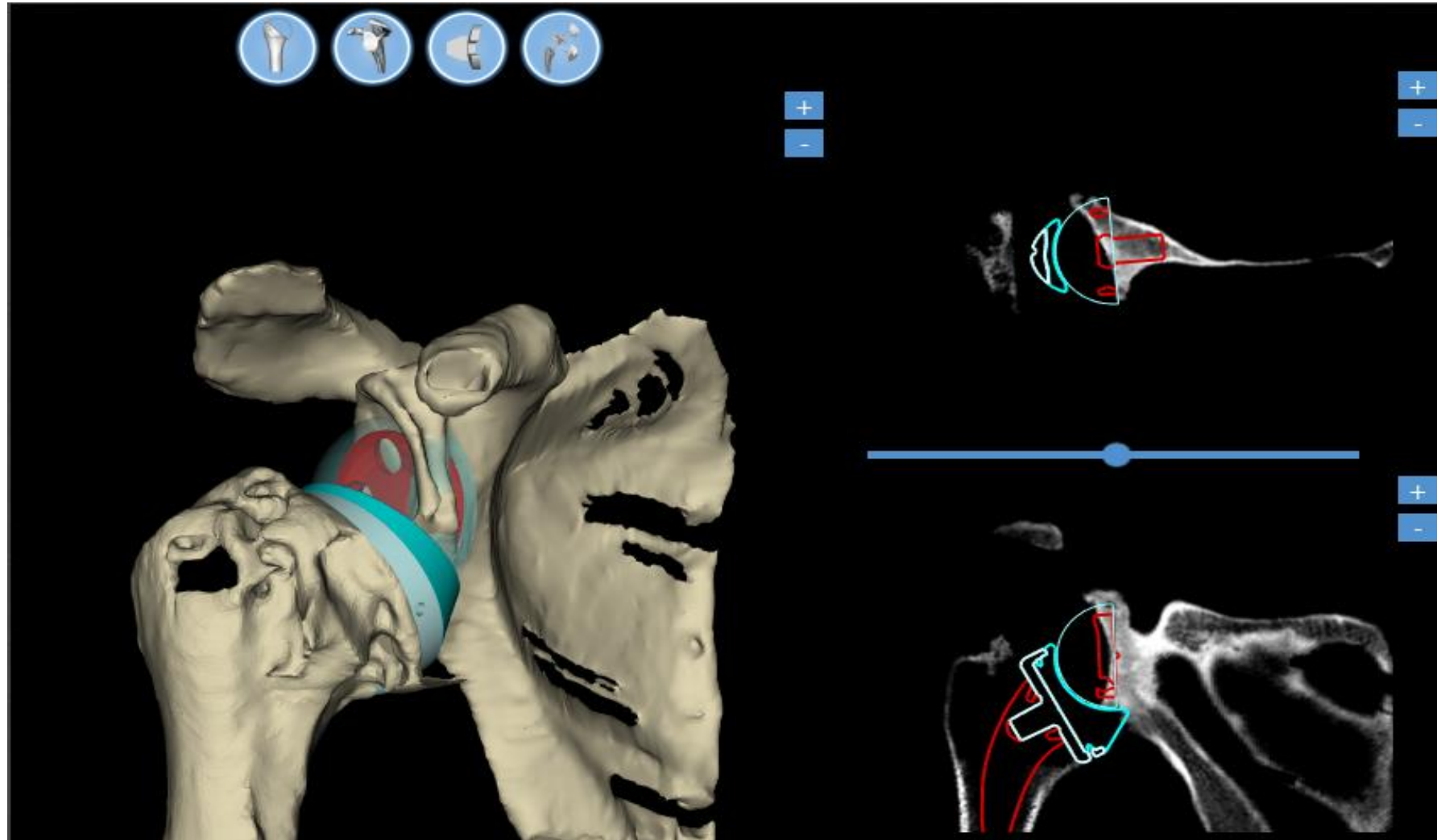


METODO P.S.I. (Patient specific instrument)

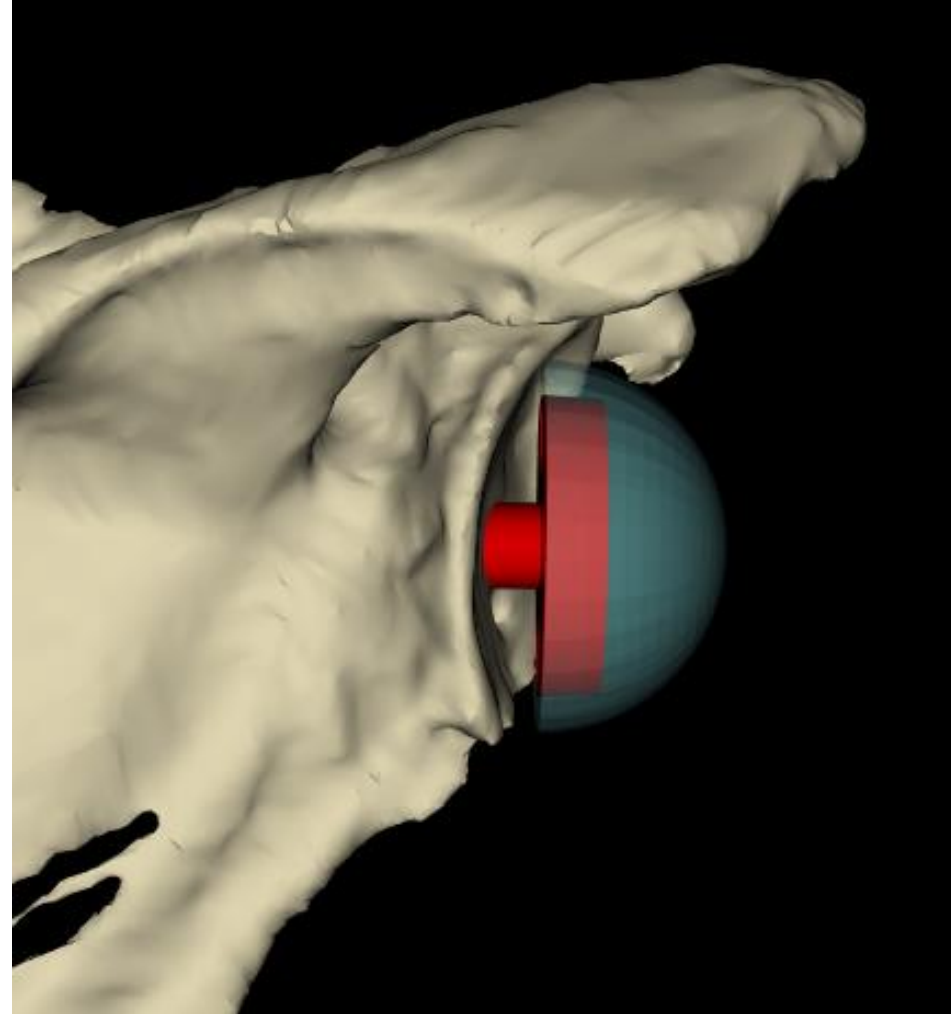
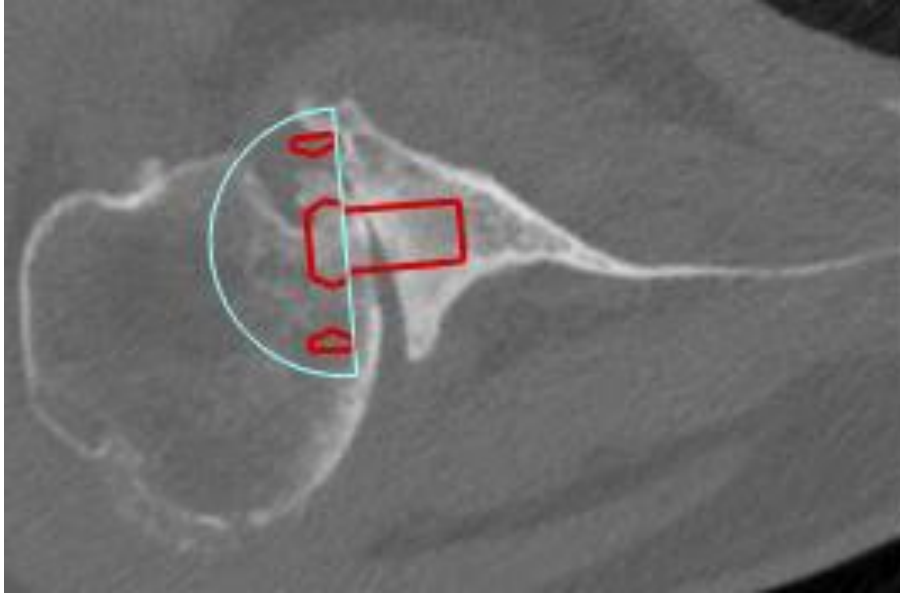


Fu 9 a.

2) Simulazione su computer (2016)



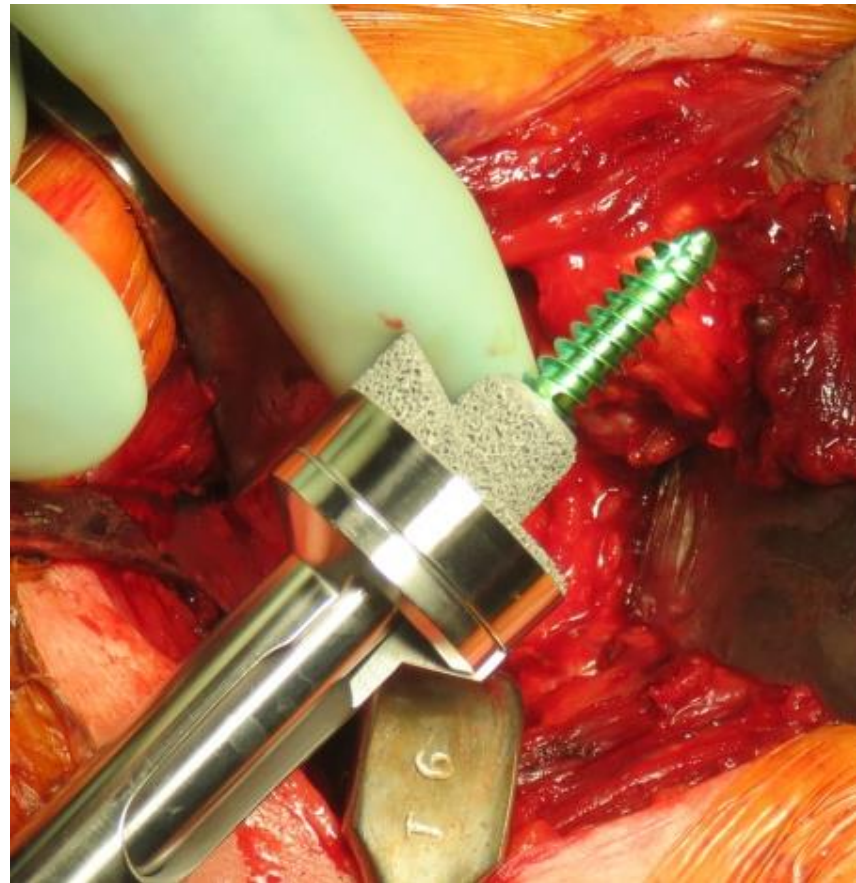
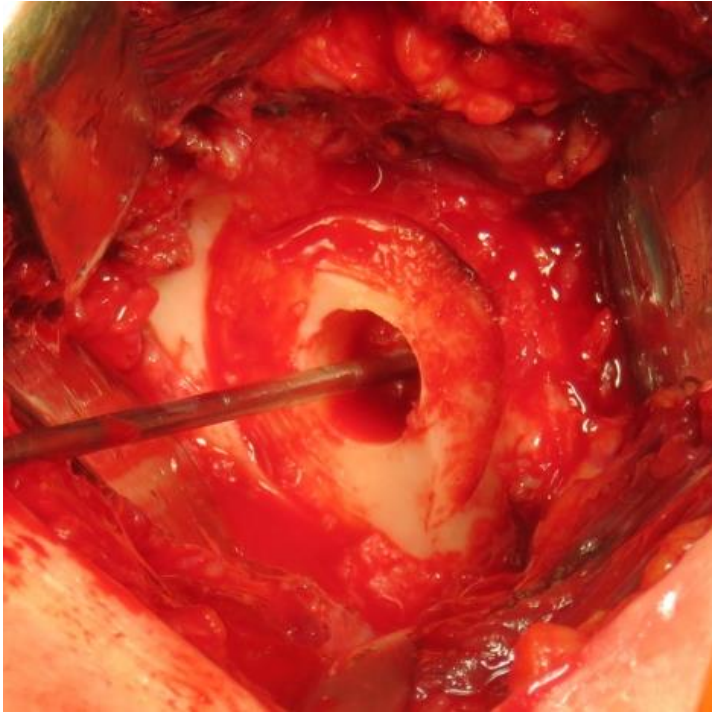
METODO Simulazione su computer



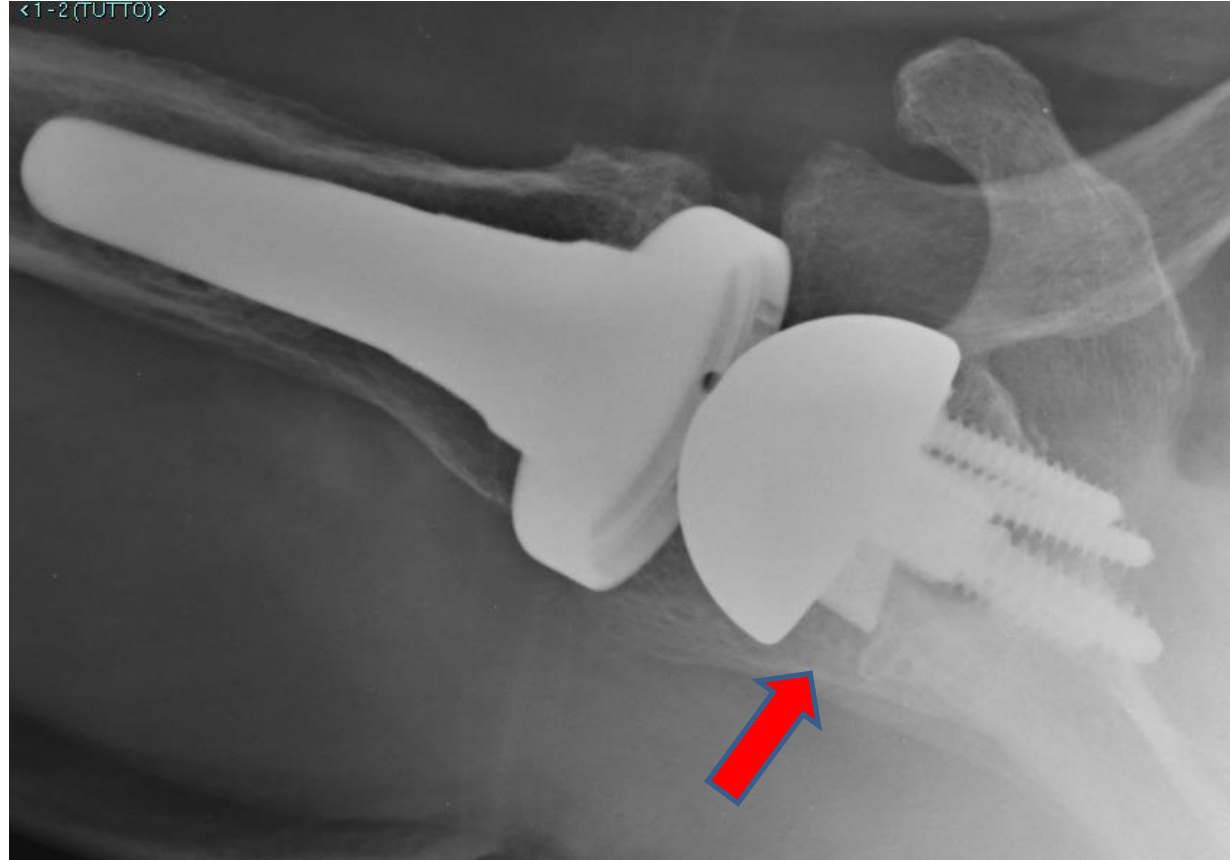
**Valutazione
perdita ossea
posteriore**

METODO Simulazione su computer

Half wedge e vite

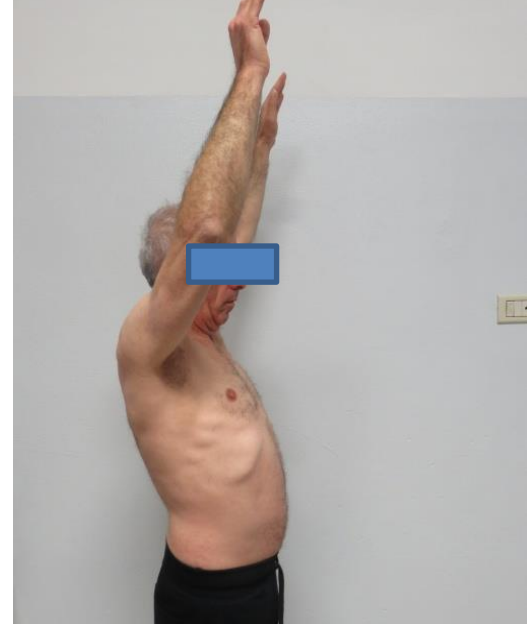


METODO Simulazione su computer



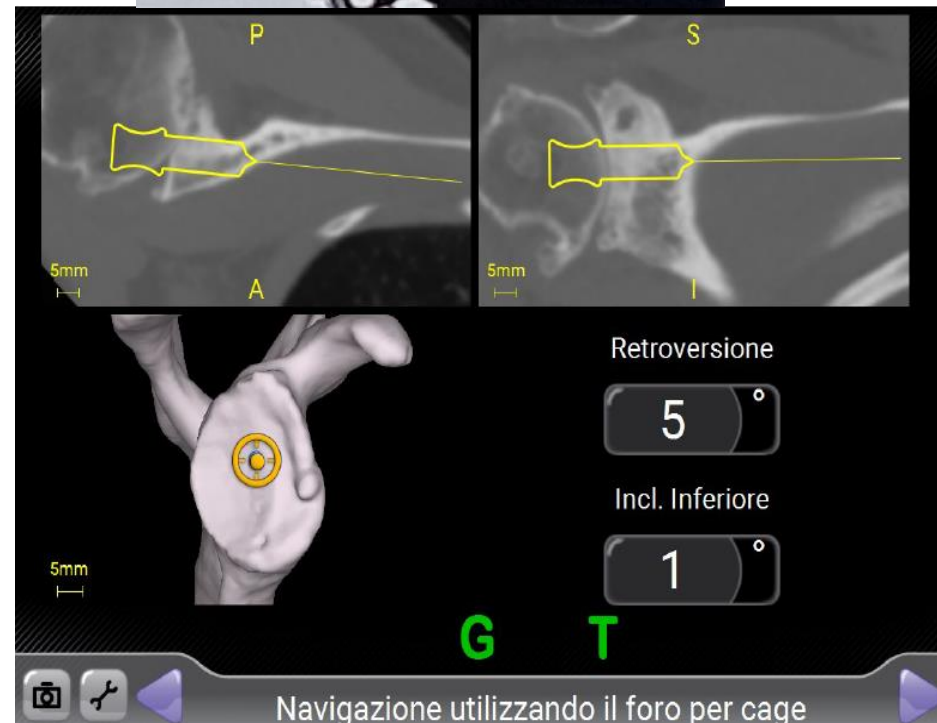
RX dopo 6 a.

METODO Simulazione su computer



f.u.
6 a.

3) METODO Navigatore GPS (2018)

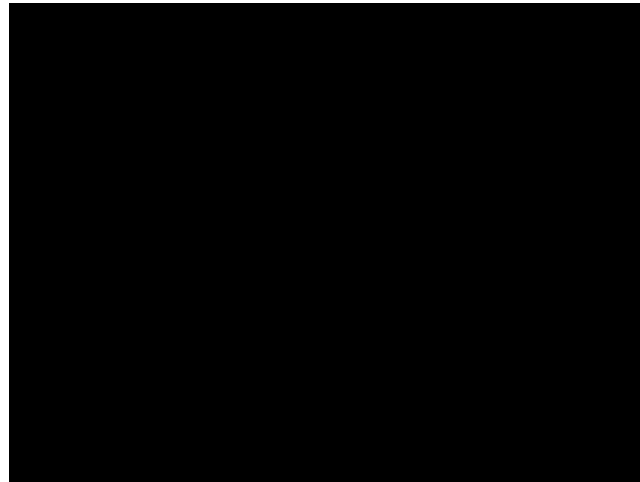


Casi complessi in deformità articolari

P.F. 16 a. Malunione 3 pregresse chirurgie



Casi complessi in deformità articolari



Animazione chirurgia virtuale

Chirurgia correttiva di deformità

3 step preoperatori:

*Tac bilaterale

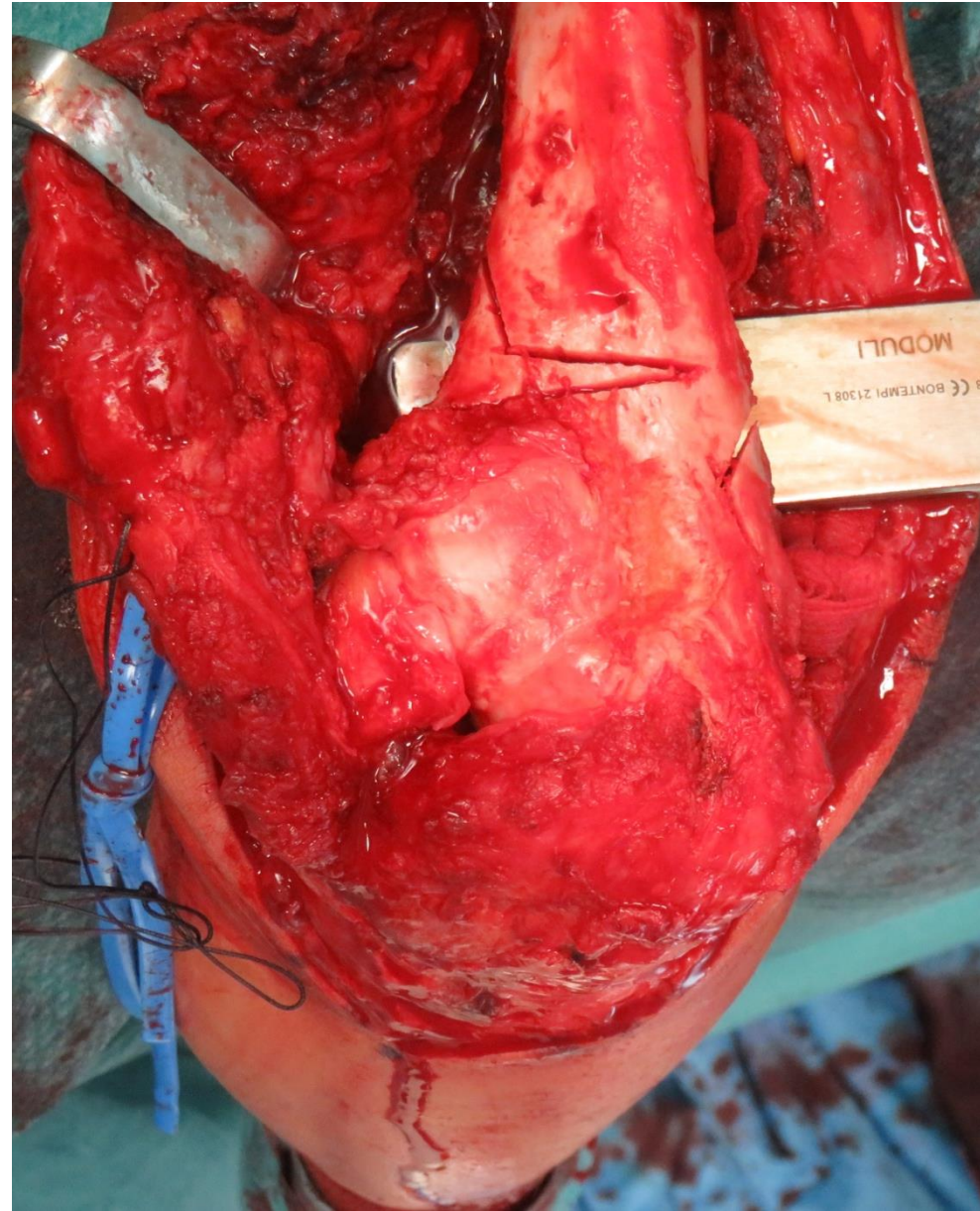
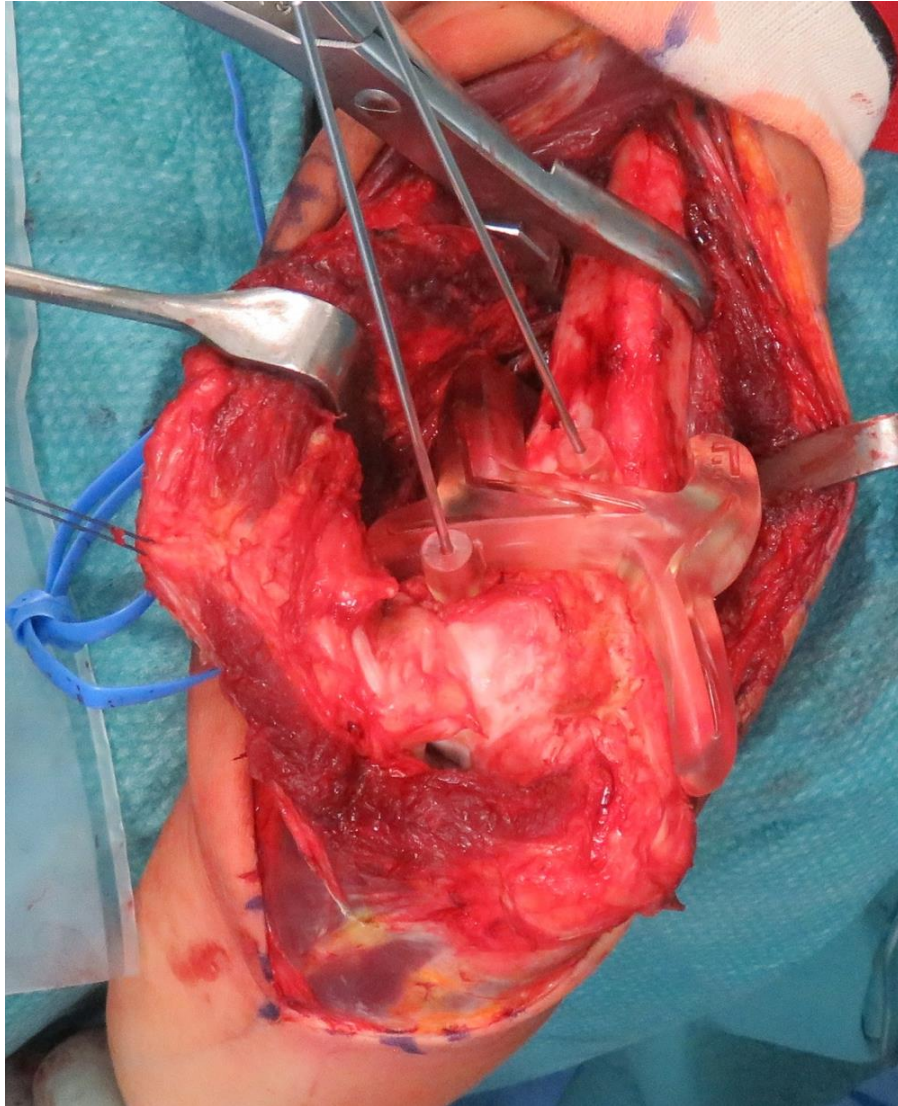
*Guide di taglio

*Simulazione su modello 3D





Chirurgia correttiva di deformità





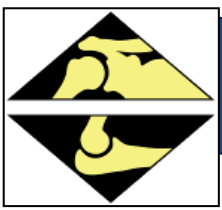
45 gg dopo intervento





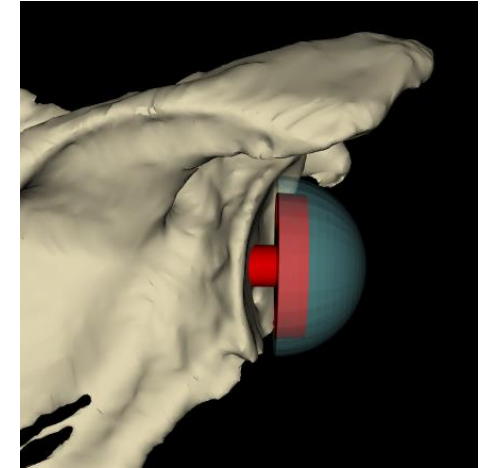
2 anni dopo intervento





Conclusione :Sistemi computer assisted

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





FONDAZIONE
ISTITUTO
ORTOPEDICO
RIZZOLI



VISTA NORD-EST Progetto