

I.R.C.C.S. – Istituto Ortopedico Rizzoli



BIOMECCANICA

**SPALLA
GOMITO**

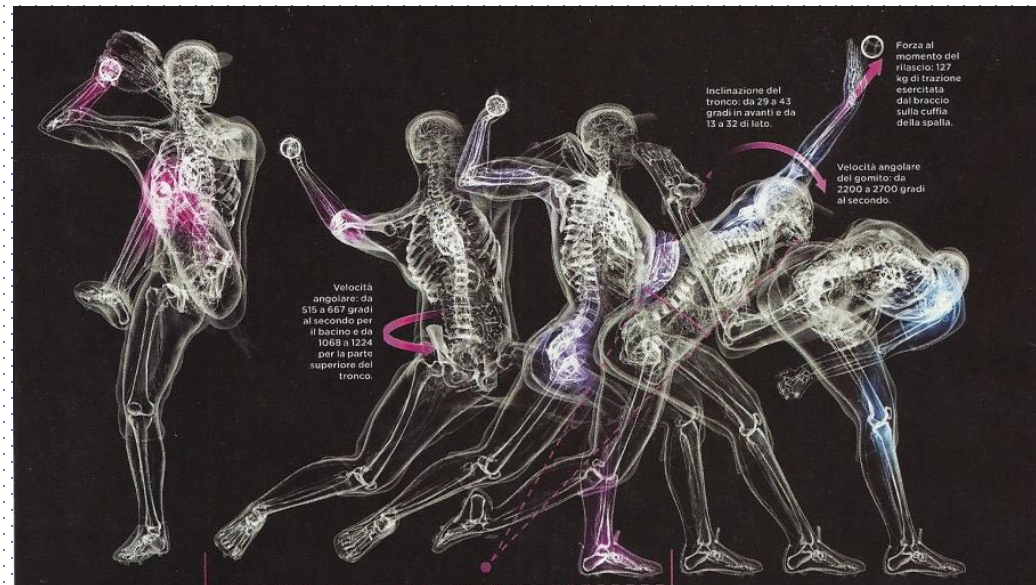
Roberto Rotini

**SC Chirurgia della Spalla
e del Gomito
Istituto Ortopedico Rizzoli**



**LE COMPLICANZE
IN ORTOPEDIA E TRAUMATOLOGIA**

**PROBLEMATICHE CLINICHE, CONSIDERAZIONI MEDICO LEGALI E
CONTROVERSIE GIURIDICHE**

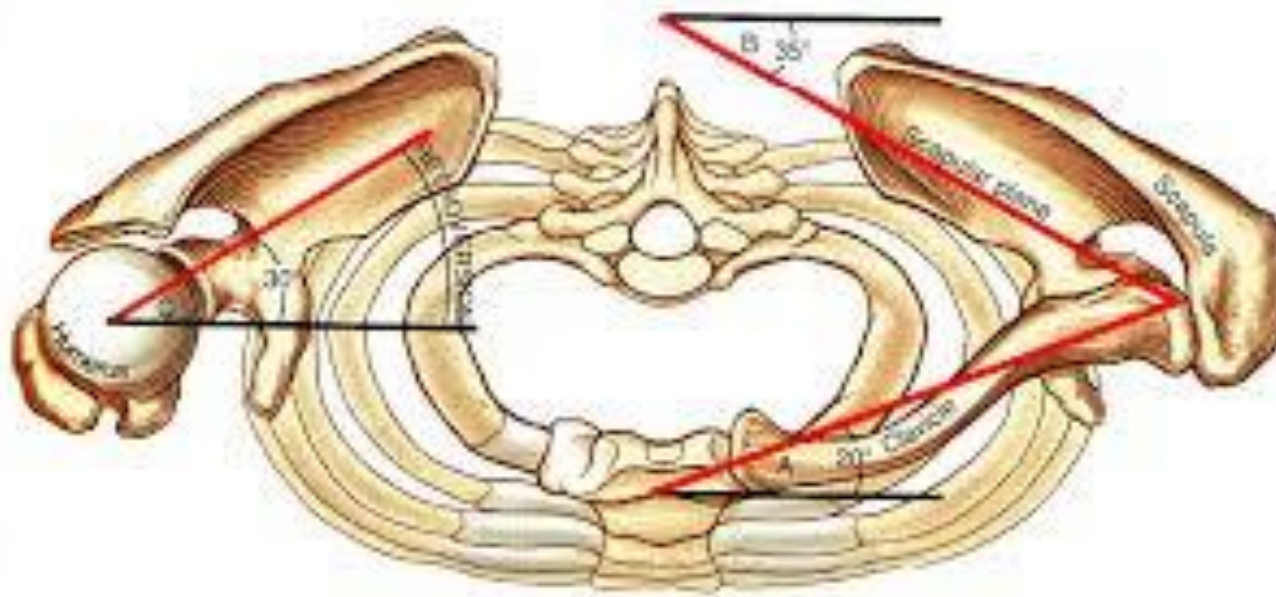




SPALLA BIOMECCANICA COMPLESSA

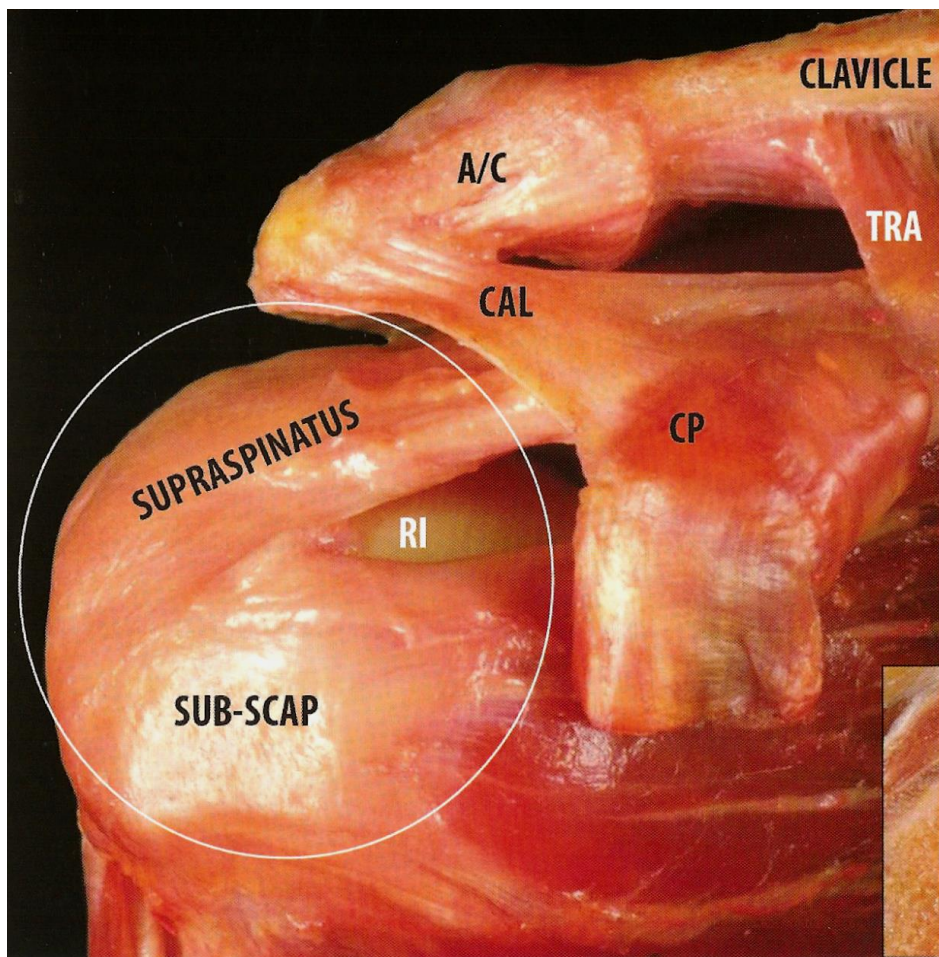


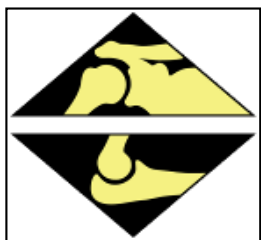
**Interazione di 4 articolazioni e
almeno 30 muscoli**





IMPORTANZA TENDINE CUFFIA DEI ROTATORI

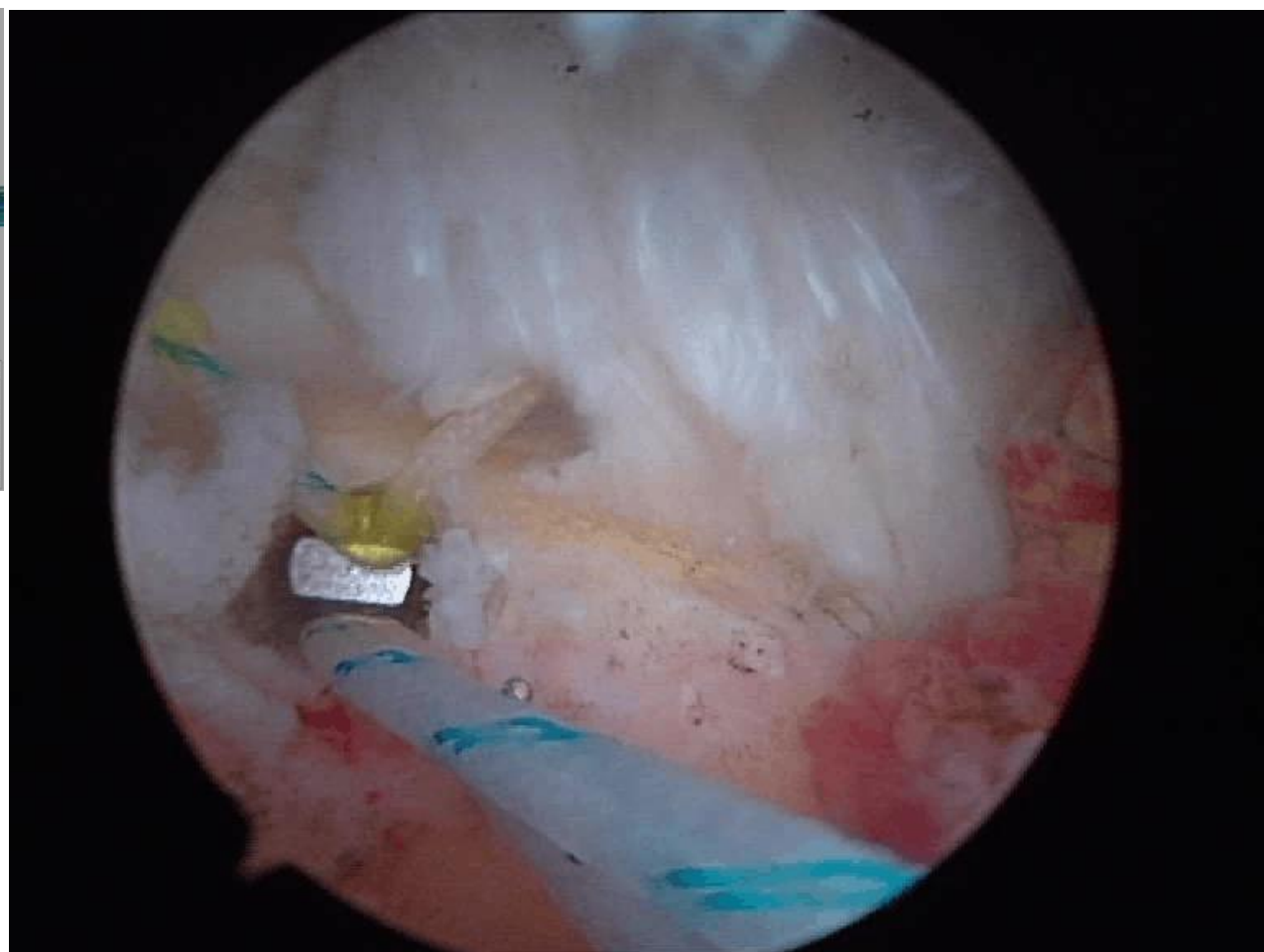
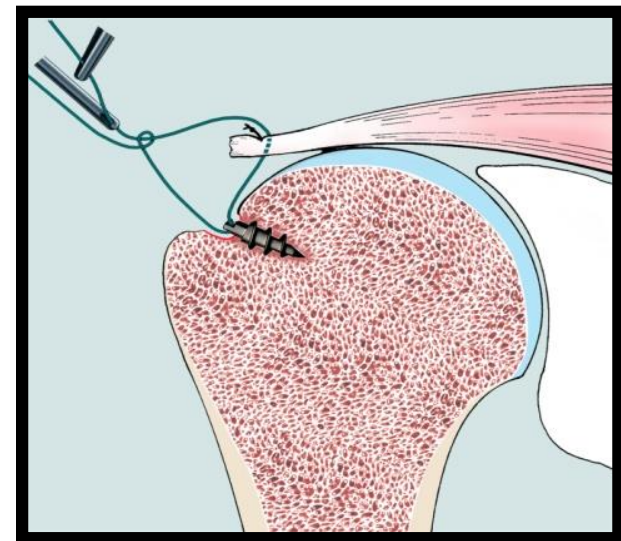
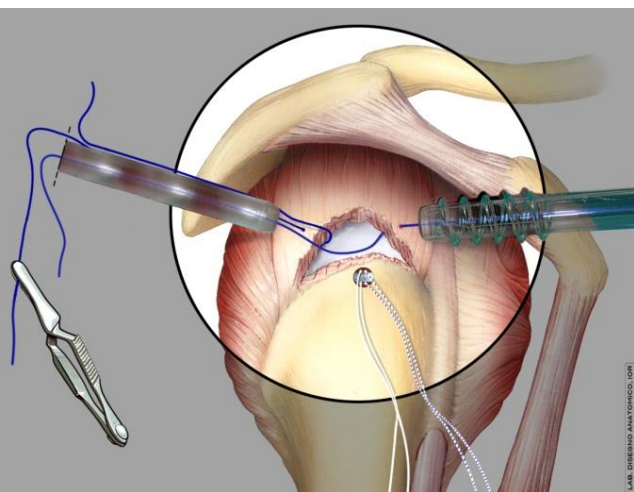




Importanza Rottura Cuffia

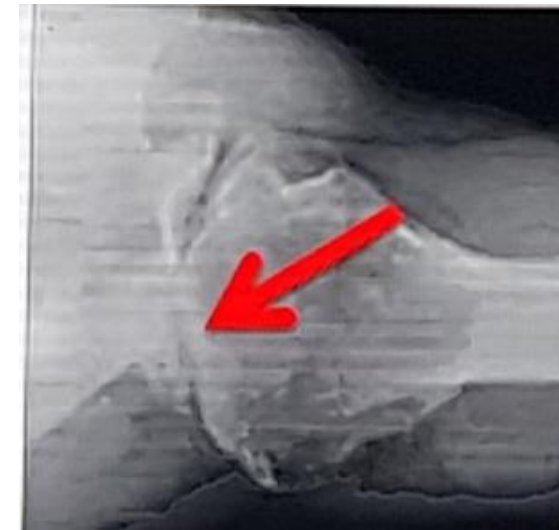
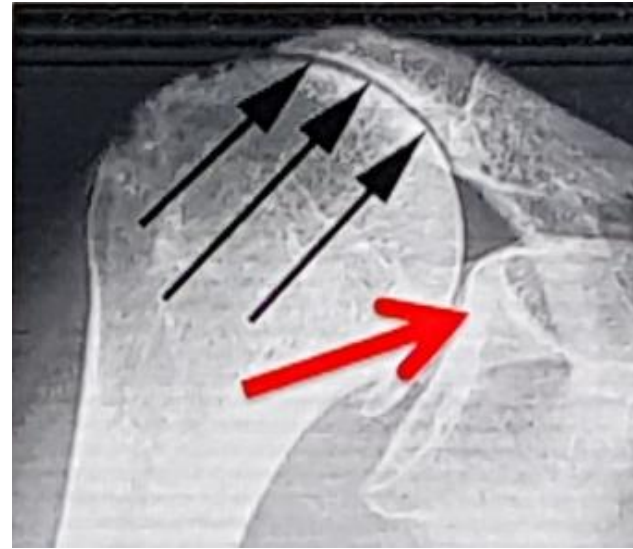
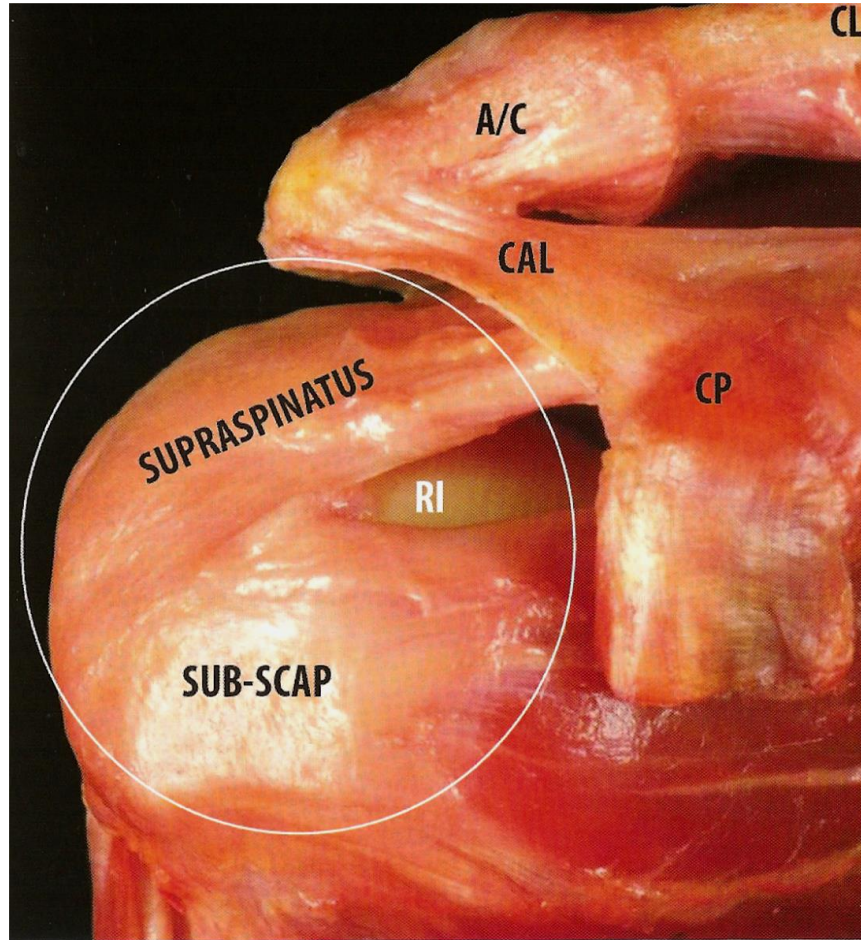


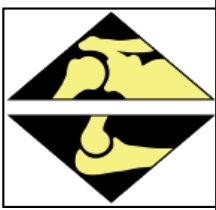
***70% casi di spalla “dolorosa”**



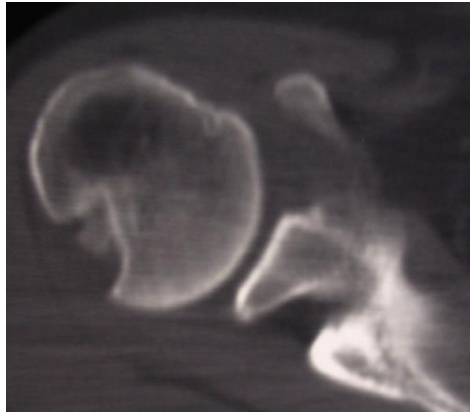
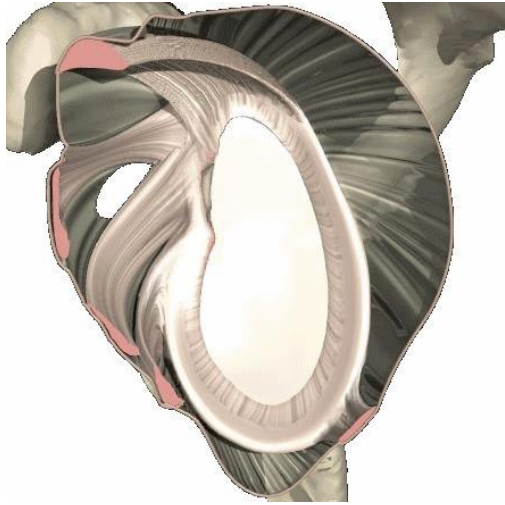


CONSEGUENZA ROTTURA CUFFIA ROTATORI

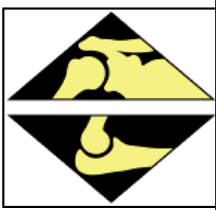




IMPORTANZA LASSITA' LEGAMENTOSA



La perdita ossea condiziona l'instabilità!!



IMPORTANZA FUNZIONE MUSCOLARE



• Scapola Alata



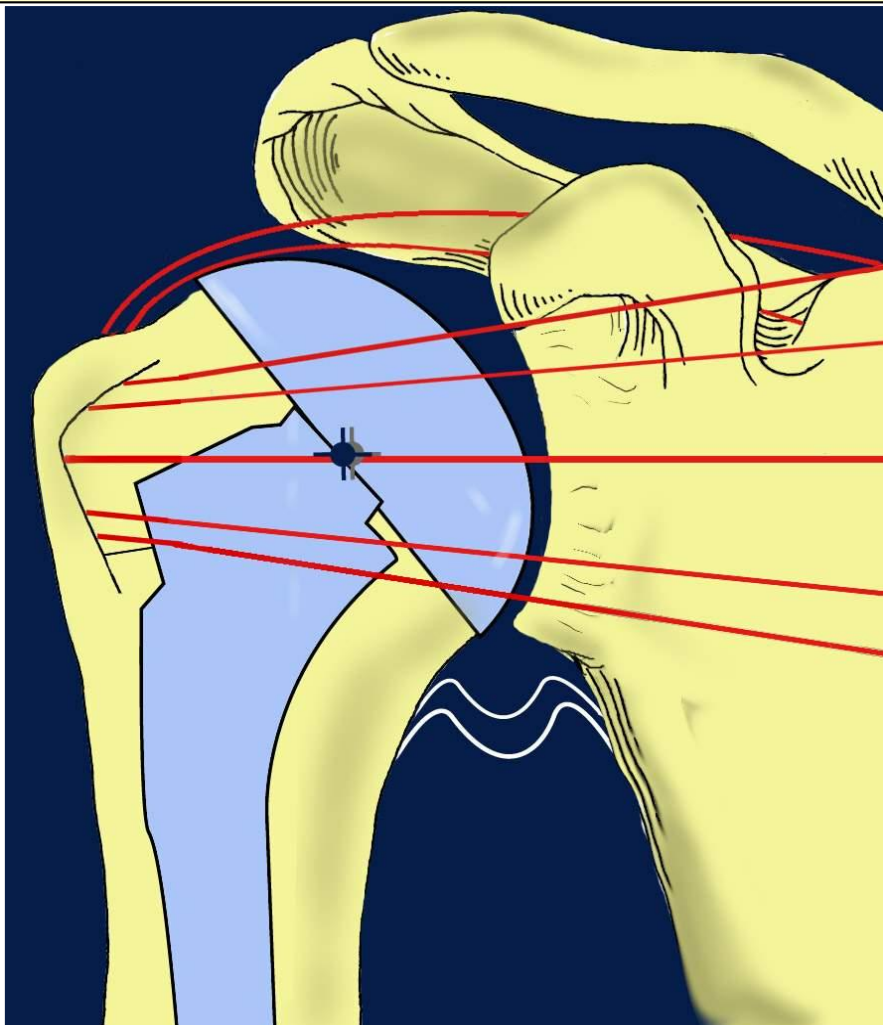
Discinesia scapolo-toracica !!



IMPORTANZA PARTI MOLLI IN PROTESI



Protesi Anatomica: rispetto centro di rotazione

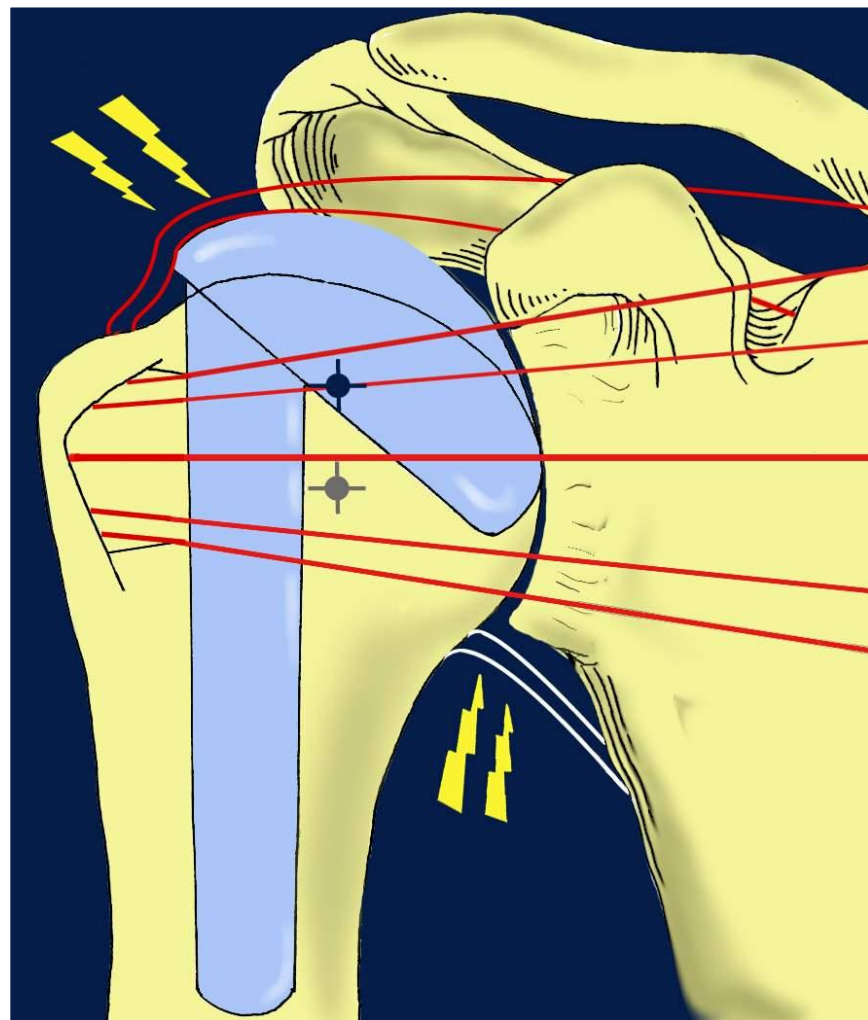
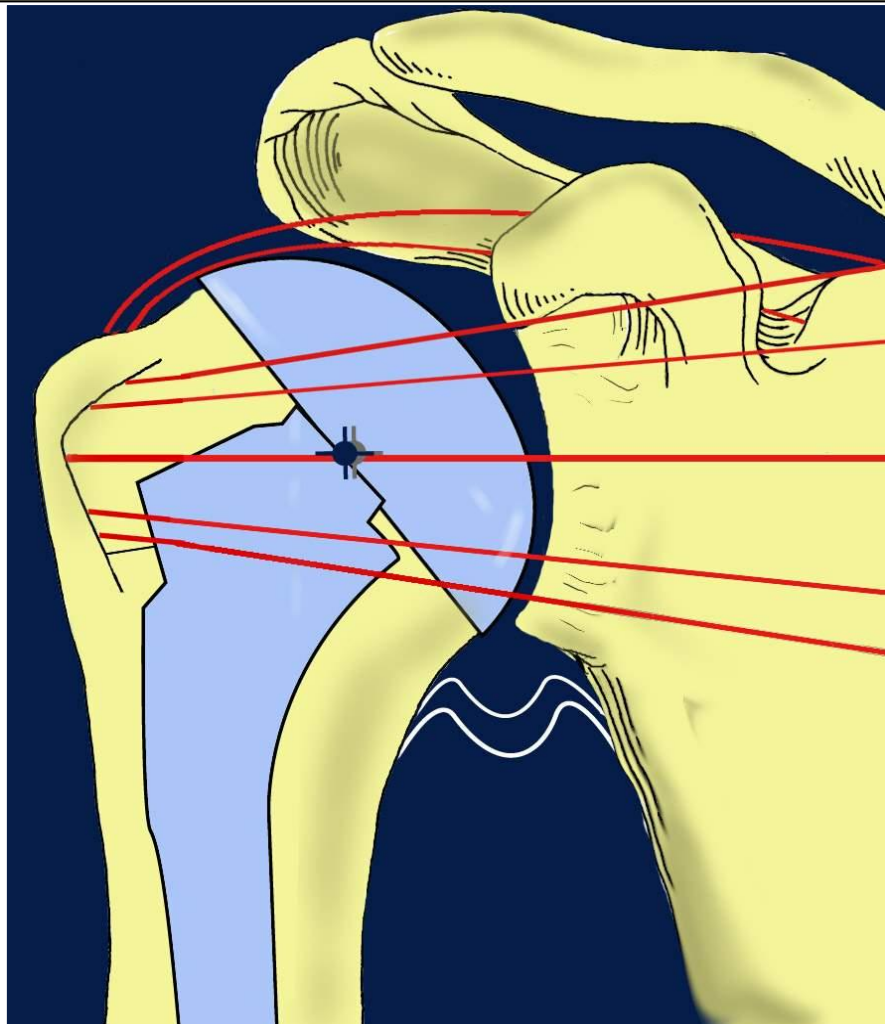


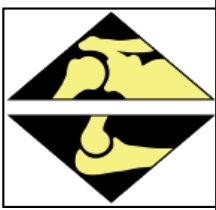


IMPORTANZA PARTI MOLLI IN PROTESI



Protesi Anatomica: rispetto centro di rotazione

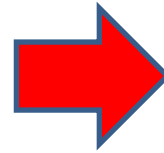
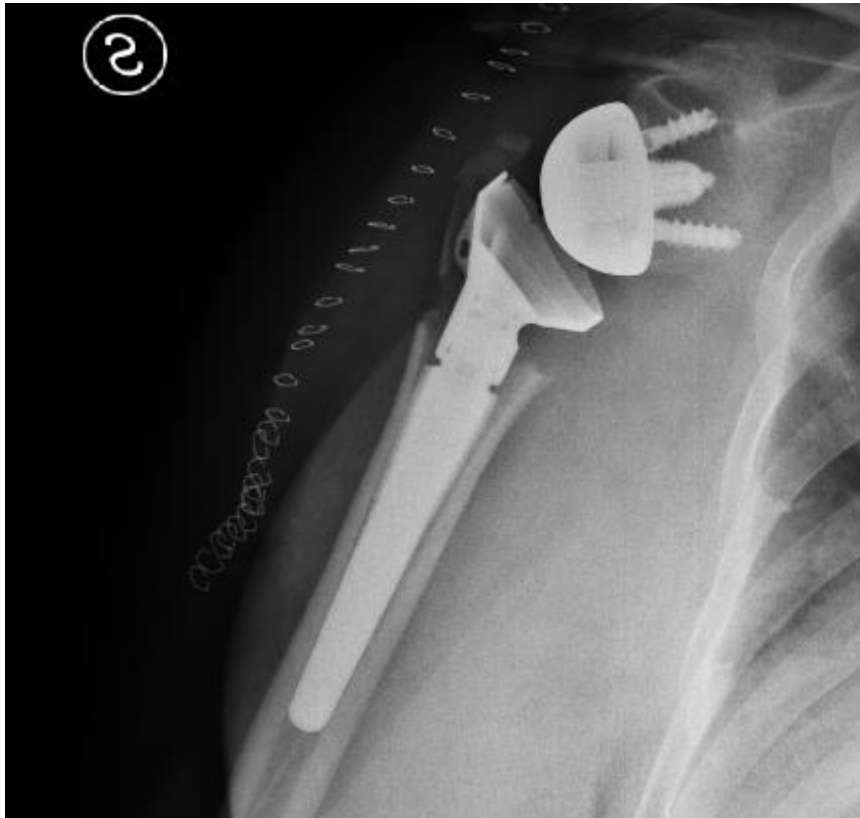


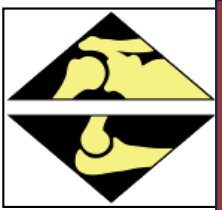


IMPORTANZA PARTI MOLLI

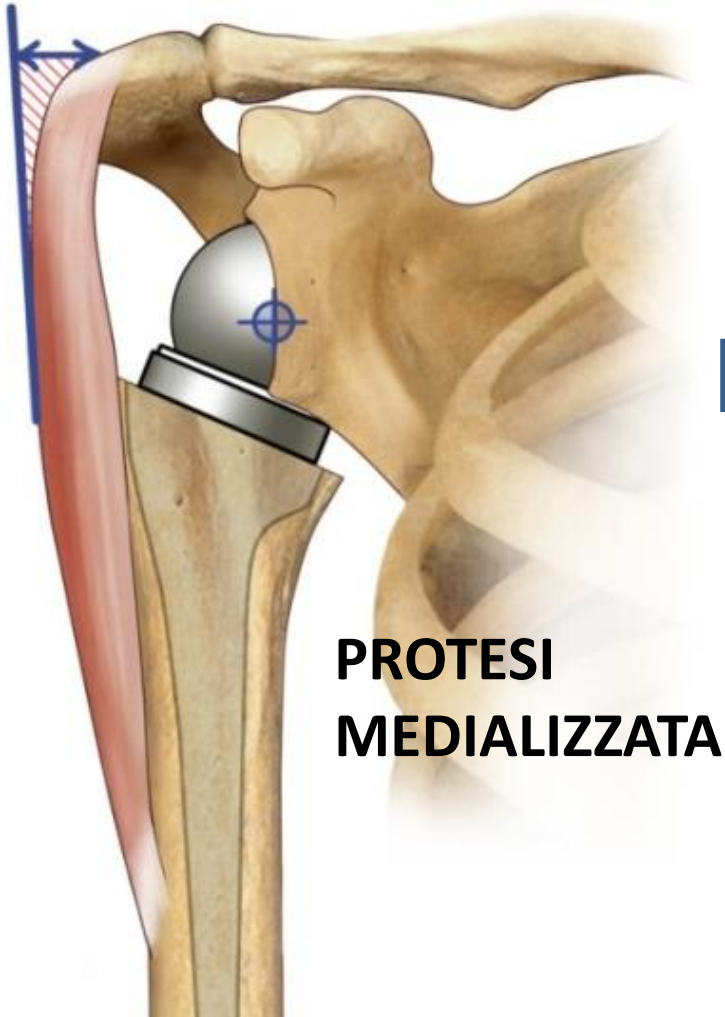


.... anche nella protesi
inversa

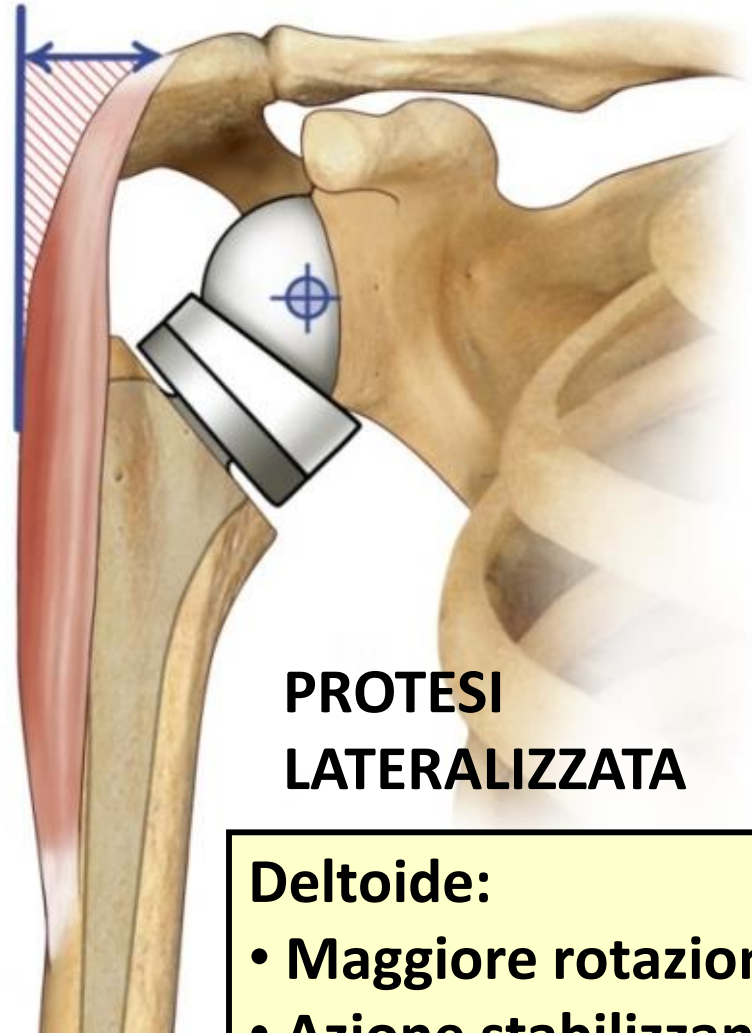




BIOMECCANICA NUOVI DESIGN PROTESICI



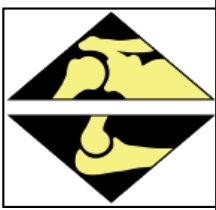
**PROTESI
MEDIALIZZATA**



**PROTESI
LATERALIZZATA**

Deltoide:

- Maggiore rotazione
- Azione stabilizzante



BIOMECCANICA NUOVI DESIGN PROTESICI



NORMALE

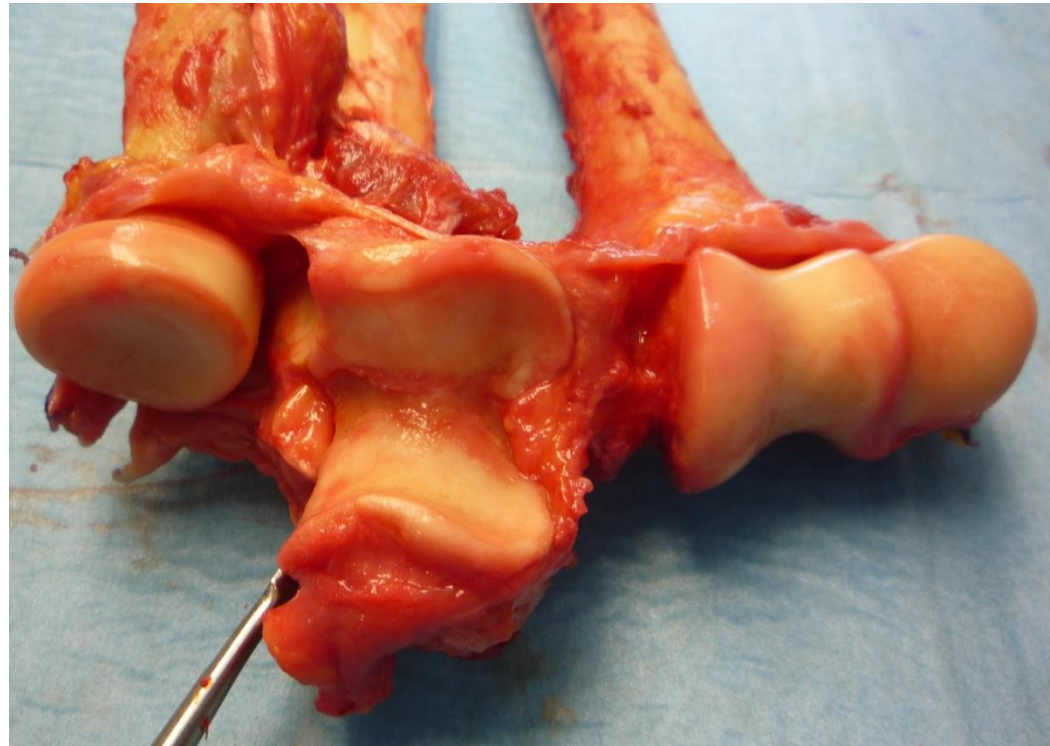
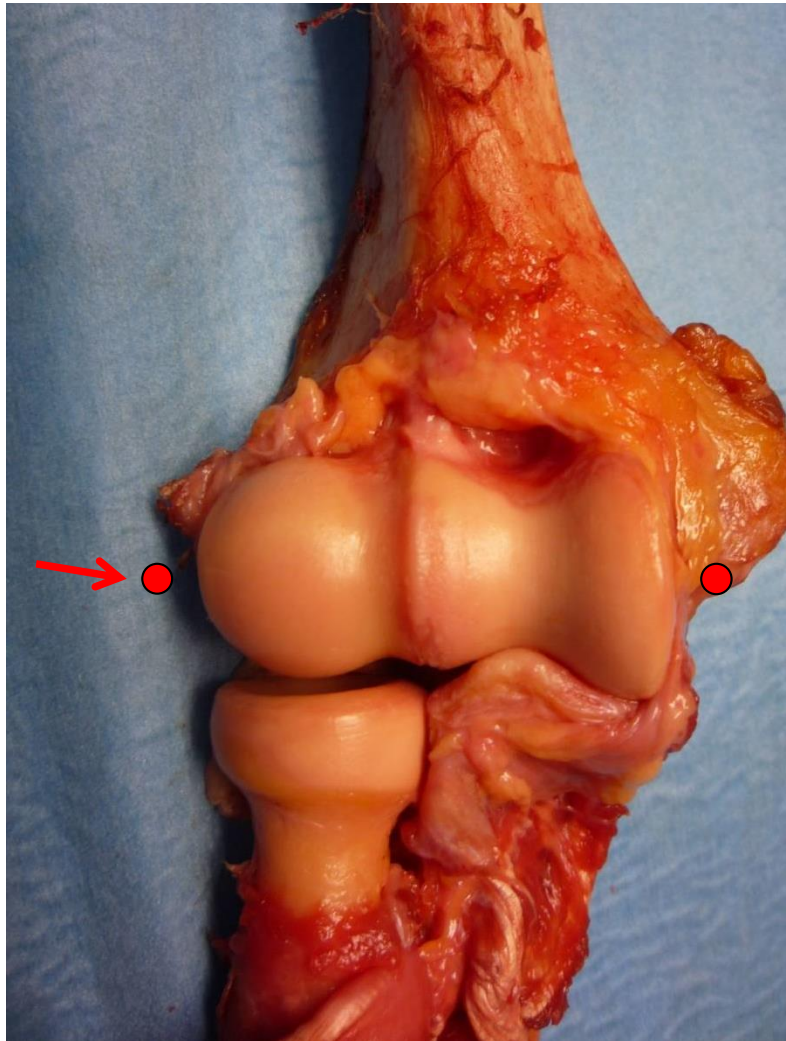
ARTROSI

**PROTESI
MEDIALIZZATA**

**PROTESI
LATERALIZZATA
CON WEDGE**



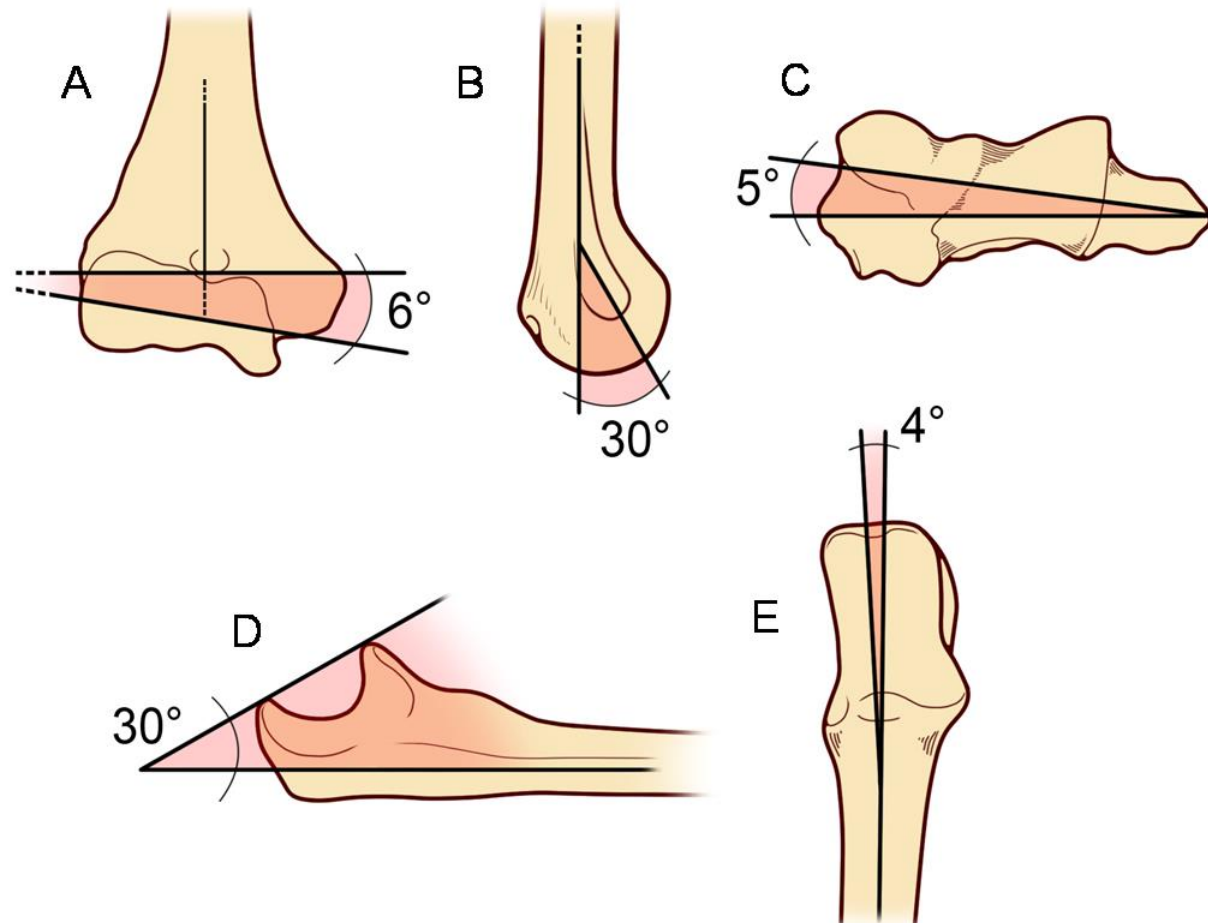
GOMITO BIOMECCANICA PECULIARE



ART. GINGLIMO TROCOIDE

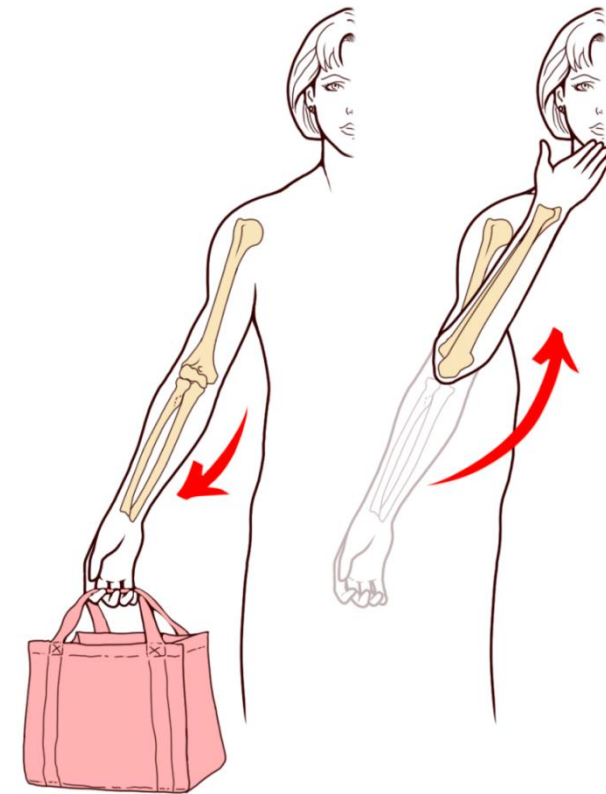


GOMITO BIOMECCANICA PECULIARE

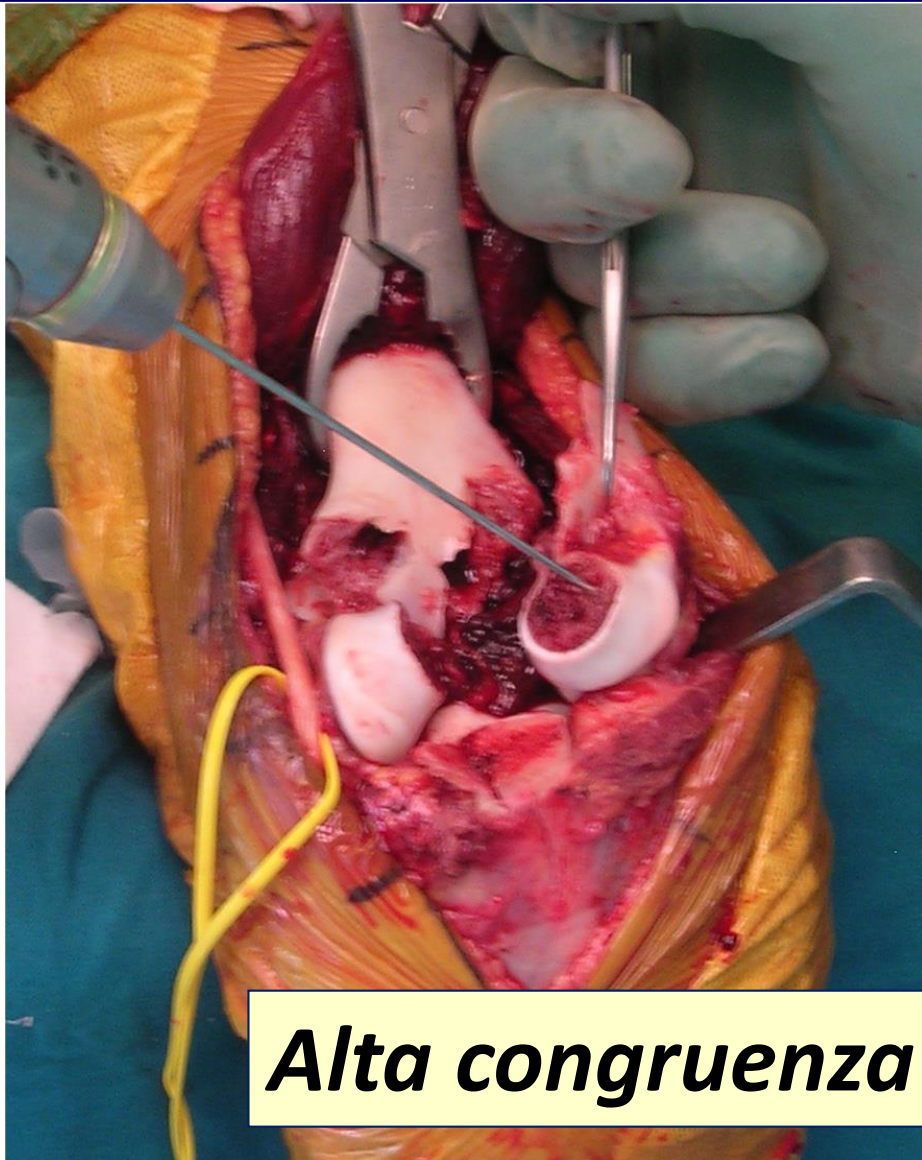


Carrying angle

**Angoli tra assi superficie articolare e
diafisi**

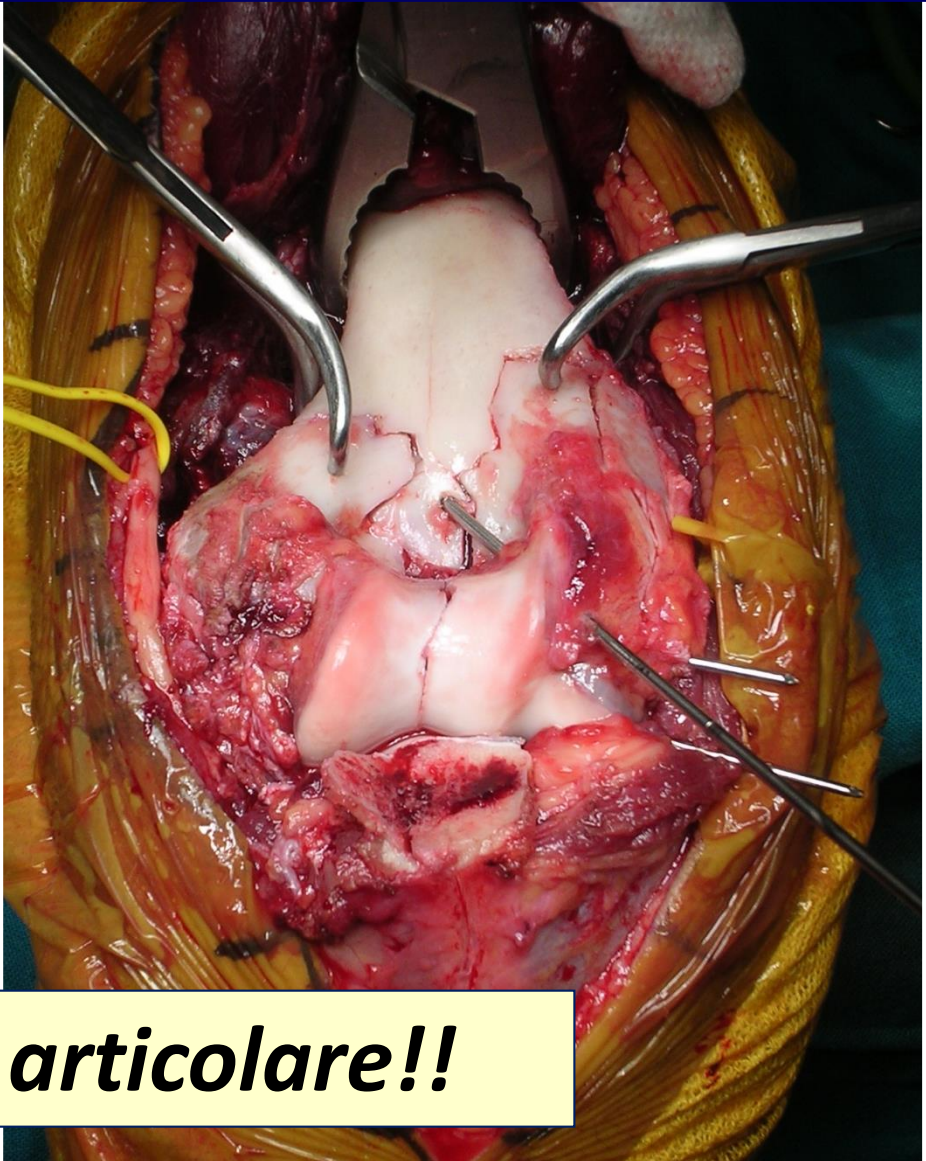
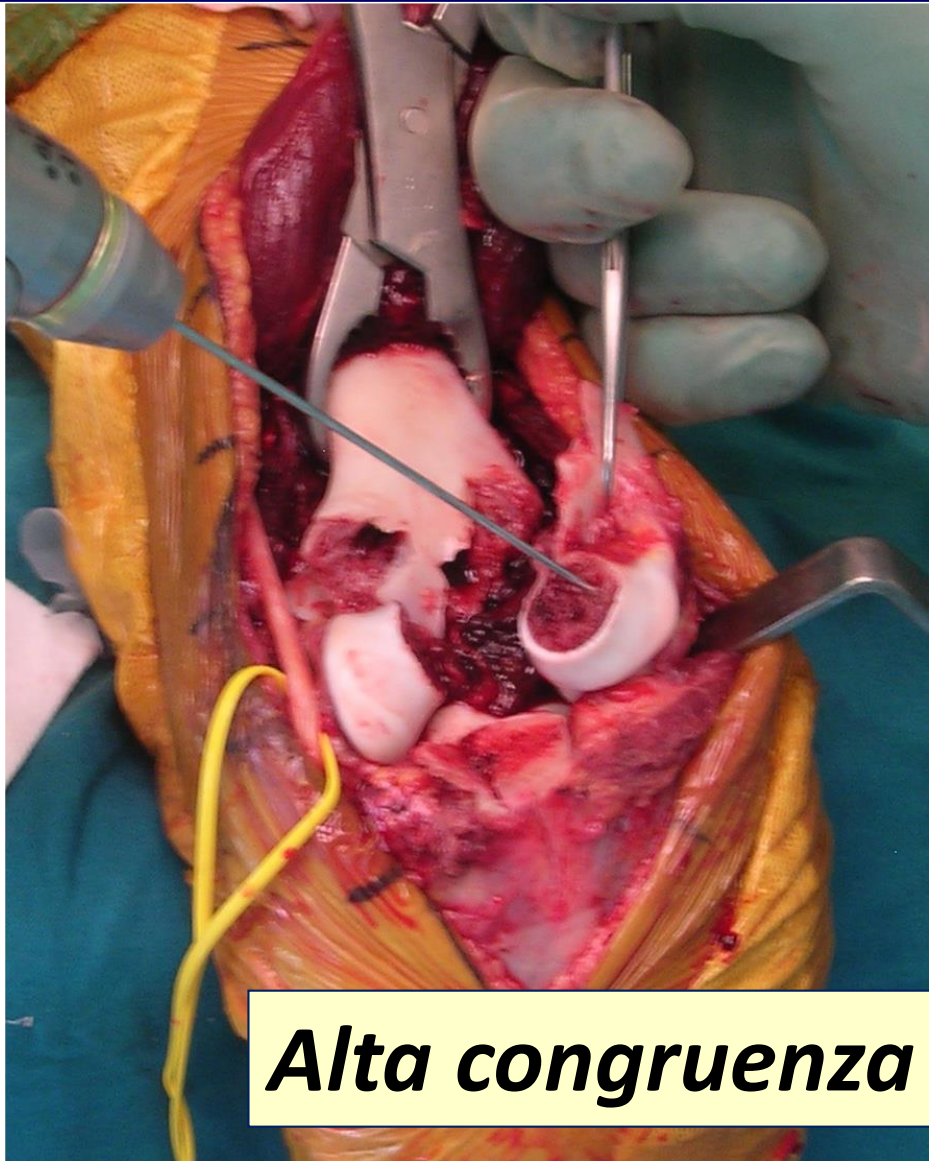


IMPORTANZA RICOSTRUZIONE ANATOMICA



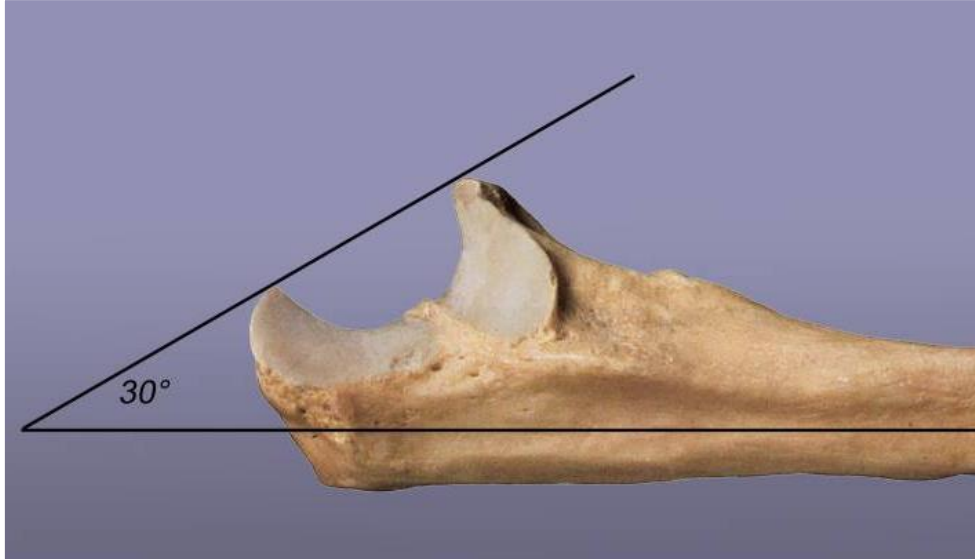
Alta congruenza articolare!!

IMPORTANZA RICOSTRUZIONE ANATOMICA

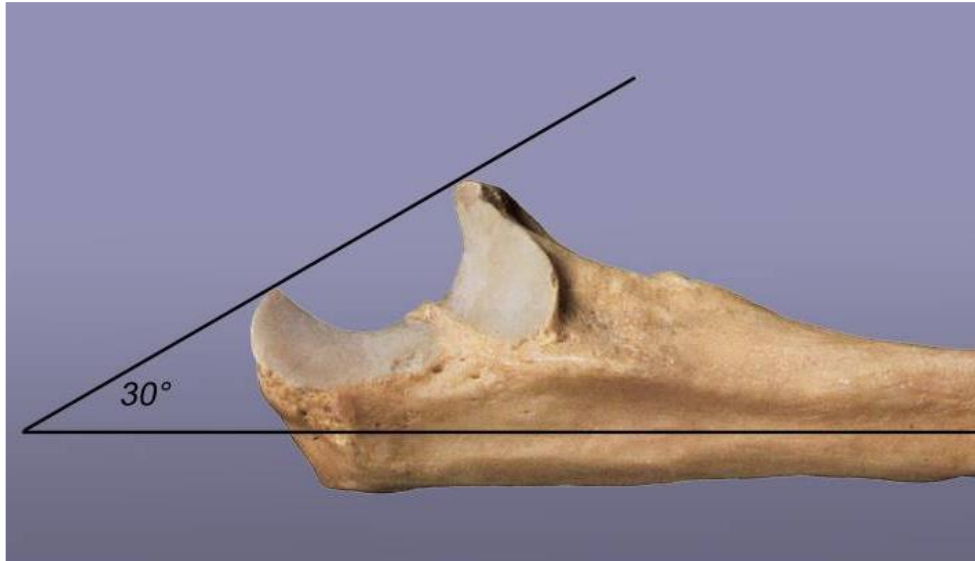


Alta congruenza articolare!!

IMPORTANZA RICOSTRUZIONE ANATOMICA

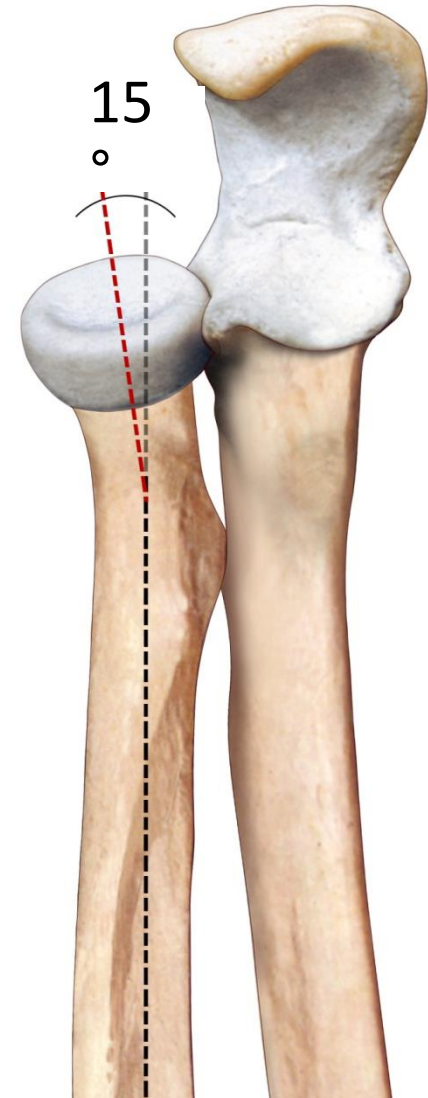


VIZIOSA CONSOLIDAZIONE RIGIDITA' INTRINSECA IRREVERSIBILE



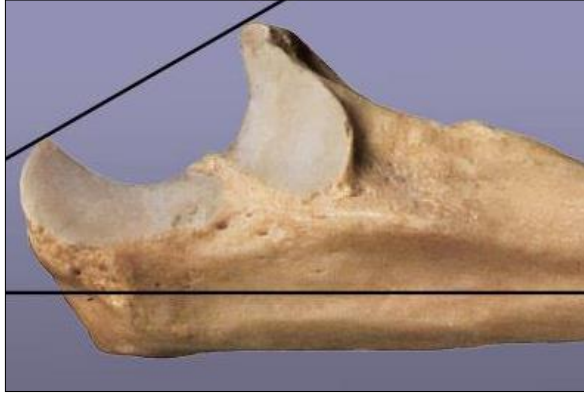
IMPORTANZA RICOSTRUZIONE ANATOMICA

***Angolo di 15°
fra diafisi e collo
del radio**





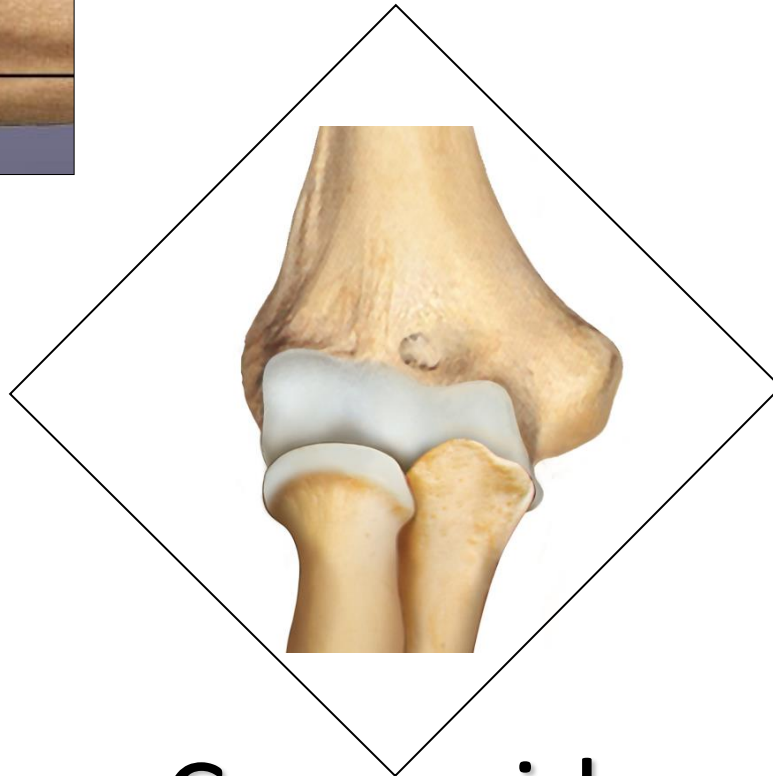
STABILIZZATORI PRIMARI



Olecrano



LCL



MCL

Coronoide



STABILIZZATORI SECONDARI



Olecrano

***Capsula Posteriore**

LCL

***Capitello radiale**
***Capitulum humeri**
***Musc. epicondilari**



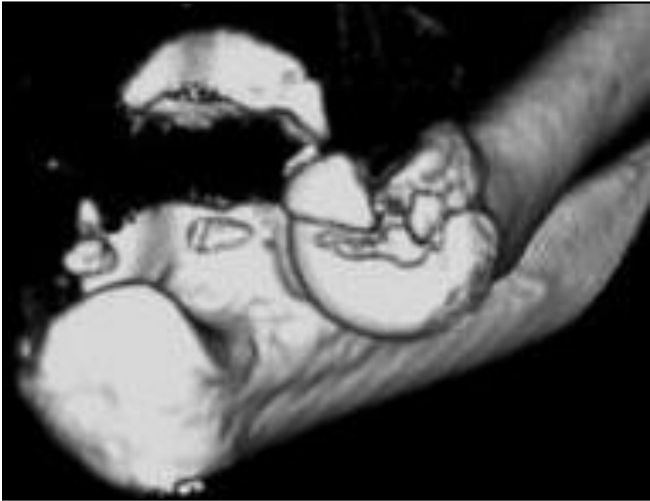
MCL

***Troclea**
***Musc. Epitrocleari**

Coronoide

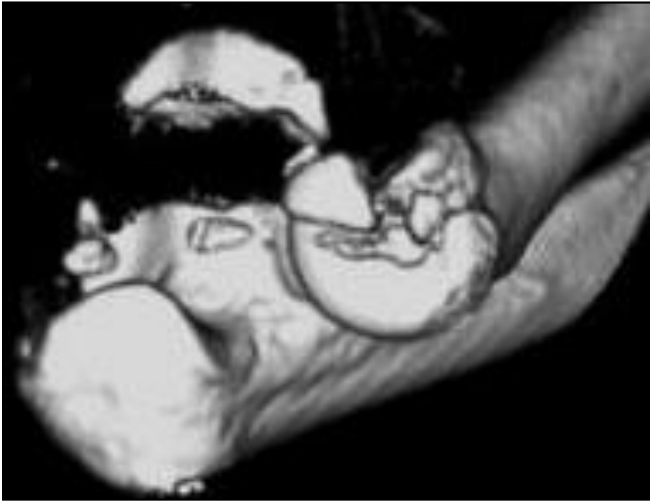
***Capsula Anteriore**

IMPORTANZA RICOSTRUZIONE ANATOMICA

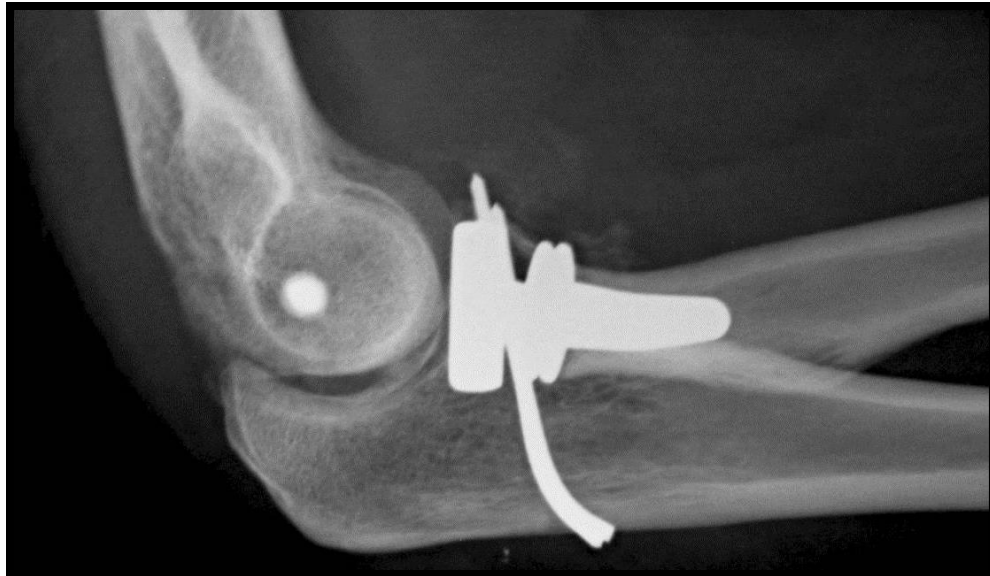
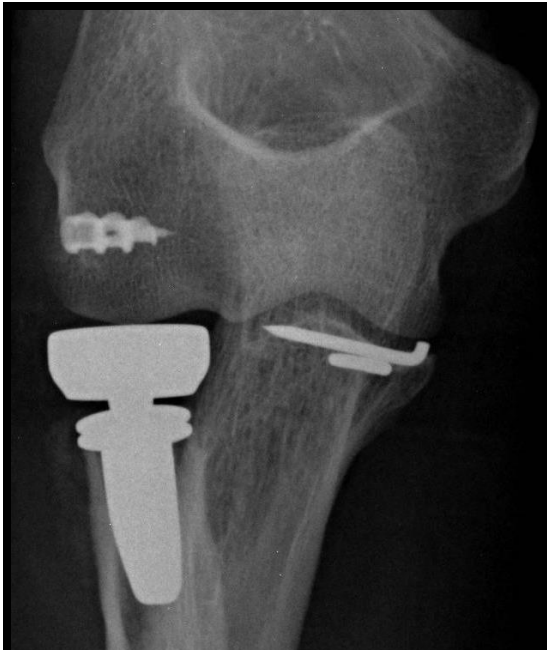


**Terribile
triade**

IMPORTANZA RICOSTRUZIONE ANATOMICA



**Terribile
triade**

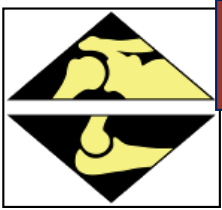




CONCLUSIONI : RISPETTO DELLA BIOMECCANICA SPALLA E GOMITO

- * BUONA FUNZIONE MIGLIORA QUALITA' VITA
- * IMPORTANZA PRIMO TRATTAMENTO CORRETTO
NEL TRAUMA





I.R.C.C.S. - Rizzoli Orthopaedic Institute



ATLANTE DI ANATOMIA CHIRURGICA

vie d'accesso in traumatologia

ARTO SUPERIORE

Gianfranco Zinghi
Raffaele Pascarella
Roberto Rotini

