

CONGRESSO NAZIONALE SOCIETÀ ITALIANA FISSAZIONE ESTERNA

Fissazione esterna nel trattamento
delle emergenze e traumi militari,
tecniche di ricostruzione degli arti e
trattamento degli esiti posttraumatici

ROMA

2025

16-17 MAGGIO 2025



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FISSAZIONE ESTERNA

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FISSATORE ARTICOLATO NELLE FRATTURE **COMPLESSE** DEL GOMITO:



*S.S. ORTOPEDIA E TRAUMATOLOGIA OSPEDALE CARLO POMA, ASST-MANTOVA
Direttore : Dott. Andrea Pizzoli*



COMPLESSITA' : INSTABILITA' **OSSO**



OMERO

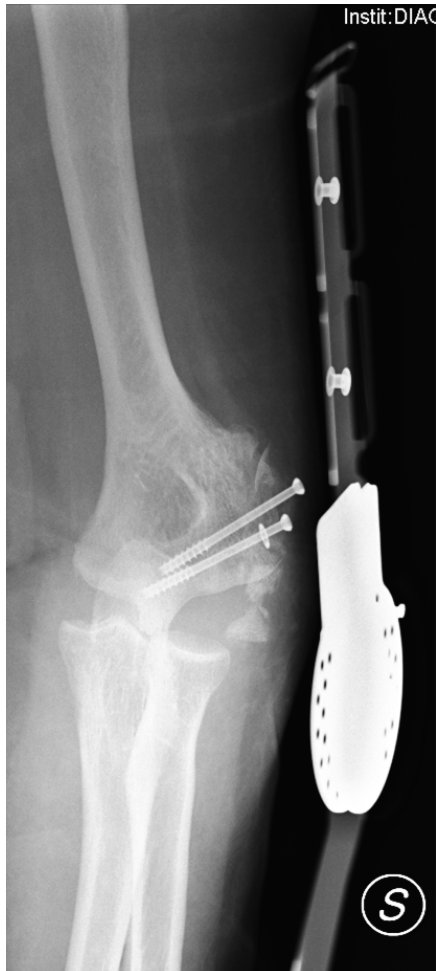
SHEAR

OLECRANO

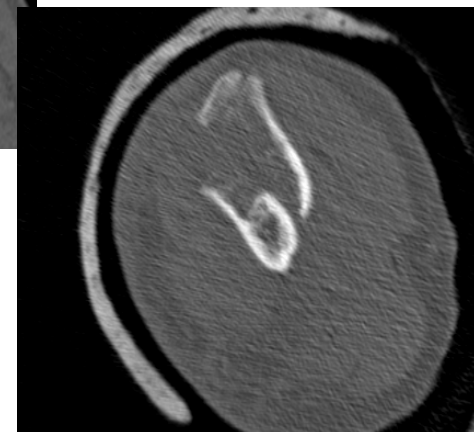
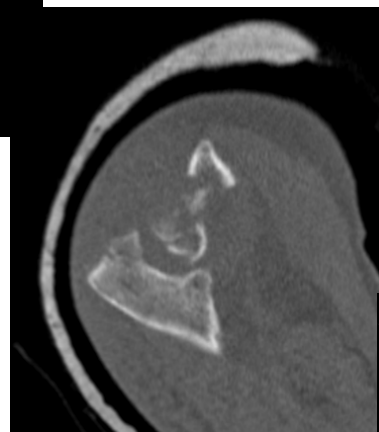
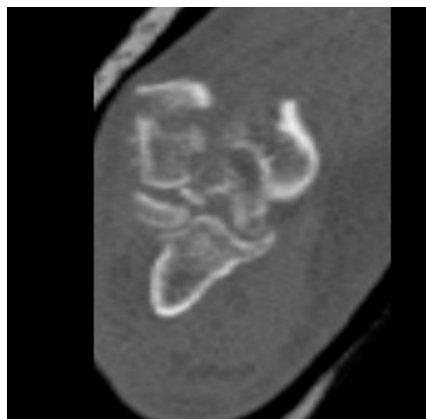


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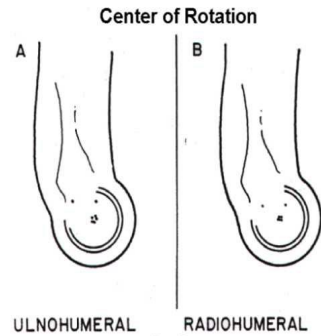
COMPLESSITA' : INSTABILITA' **TESSUTI MOLLI**



COMPLESSITA': **Qualità dell'osso**



Semplicità' BIOMECCANICA



On the tracing of the true lateral roentgenograms of all eight elbows, the instant centers of rotation for ulnohumeral motion (A) were tightly clustered about the center of the arc formed by the trochlear sulcus, except that the instant center for the last 10 degrees of flexion was displaced proximally toward the coronoid fossa and the instant center for the last 10 degrees of extension was displaced posteriorly and proximally toward the olecranon fossa. The instant centers for motion of the radiohumeral joint (B) showed an almost identical distribution, with the instant center for the last 10 degrees of flexion displaced toward the radial fossa and the center for the last 10 degrees of extension displaced toward the posterior aspect of the capitellum.

London, J.T.: Kinematics of the Elbow. JBJS 63 A (1981)

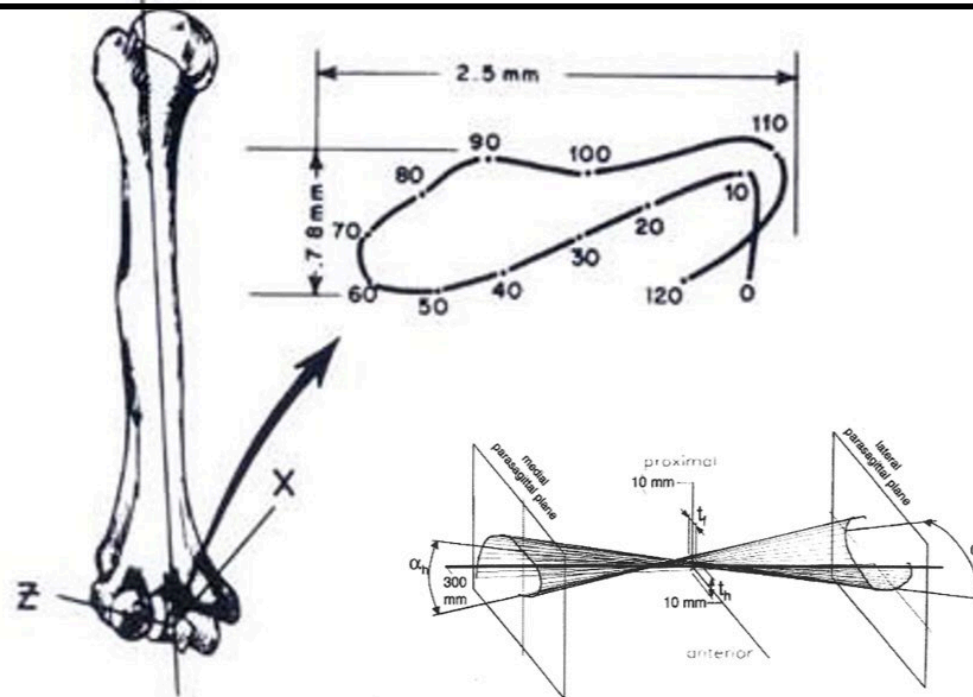
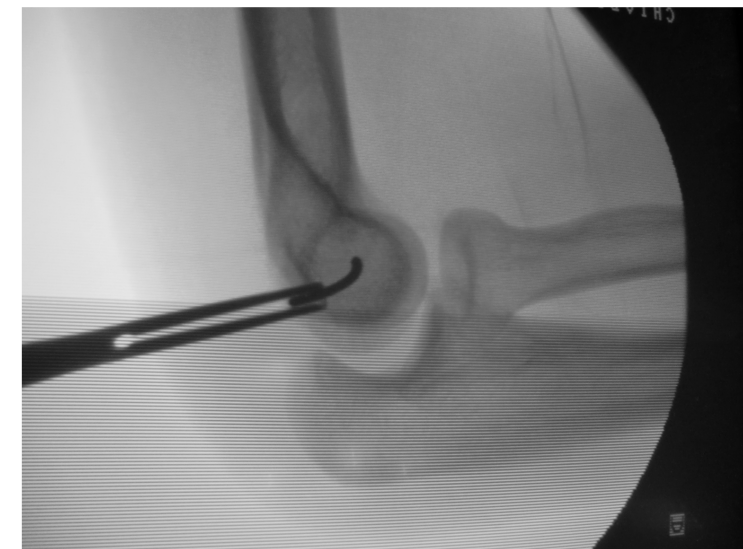


FIG. 5
 Configuration and dimensions of the locus of the instant centers of rotation of the elbow *.

IL CENTRO DI ROTAZIONE



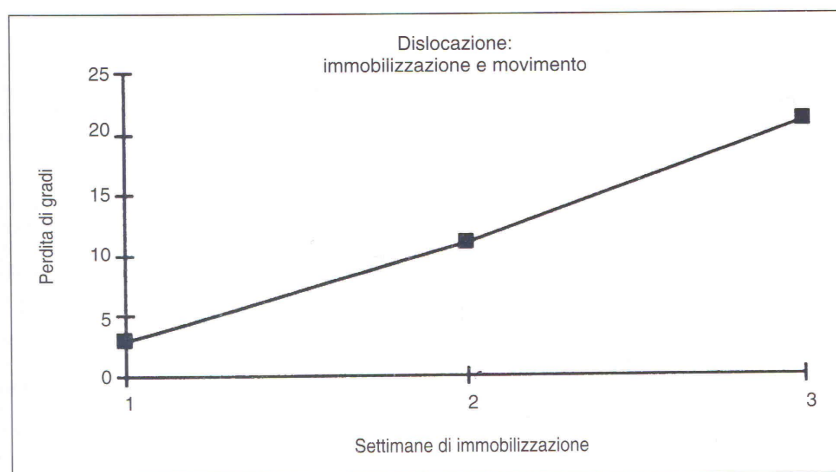
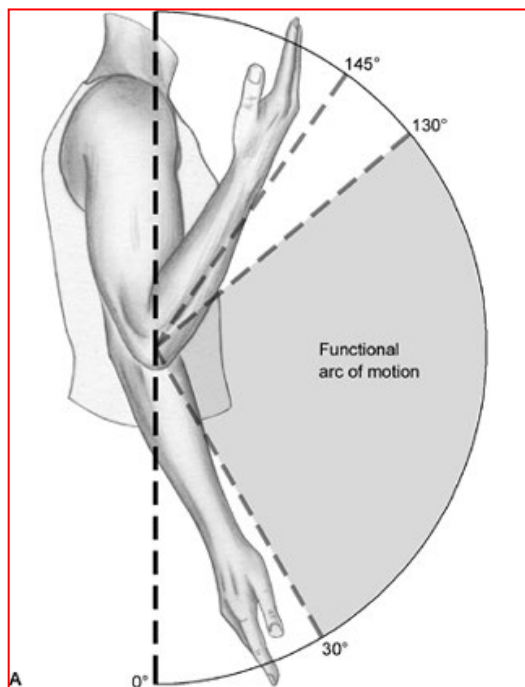
FISSAZIONE ESTERNA ARTICOLATA: **RAZIONALE**

The concept of the dynamic fixator is to provide a means that will allow **elbow motion**

while **protecting** the articular surface and the collateral ligaments as they heal....in all those situation in which you have to manage a primary or residual instability.

FISSAZIONE ESTERNA ARTICOLATA: **OBIETTIVO**

- **STABILITY**:...obtain and maintain concentric reduction of the elbow
- **MOTION**:...early motion should be initiated in order to re-establish a functional range of motion (100° of rotation, 100° of flexion/extension)



Prozman	Numero	Settimane di immobilizzazione	Perdita del movimento
	27	1	3
	13	2	11
	7	3	21
Totale	47		8



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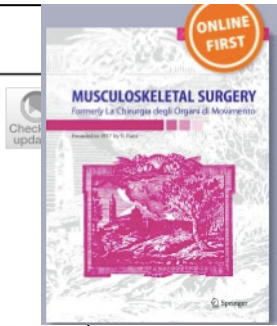
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MUSCULOSKELETAL SURGERY
<https://doi.org/10.1007/s12306-019-00632-z>

ORIGINAL ARTICLE

The use of articulated external fixation for complex elbow trauma treatment

A. Pizzoli¹ · M. Bondi¹ · L. Schirru¹ · R. Bortolazzi¹



FISSAZIONE ESTERNA ARTICOLATA: **INDICAZIONI**

- **FRATTURE LUSSAZIONI INSTABILI**

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F.L. 63 aa (caduta al lavoro): TRIADE TERRIBILE



TERRIBLE TRIAD:

Capitello radiale (Type IV)

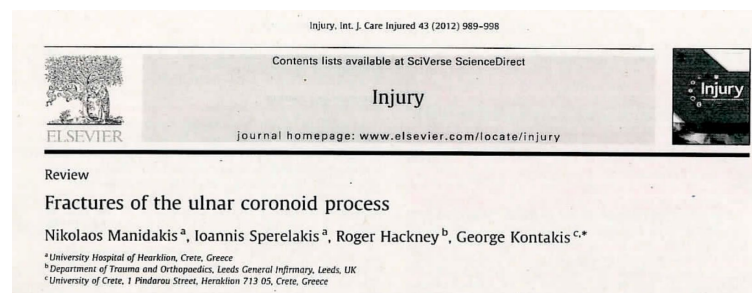
Lussazione gomito

Fx Coronioide (type I Morrey)





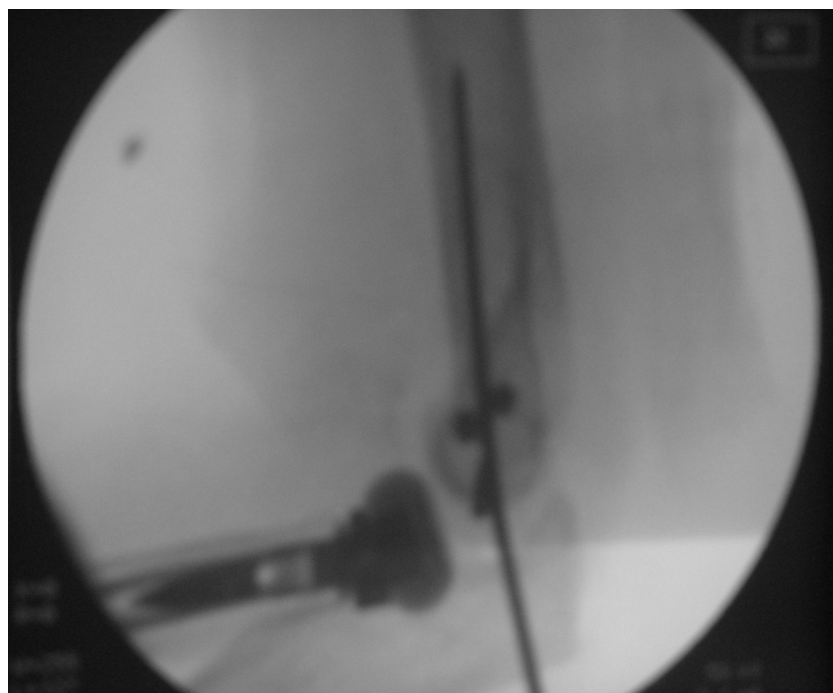
Instabilità post- riduzione: 100% casi



Ex fix in Terrible Triad :
 $175/36 = 20,5\%$



Instabilità post ricostruzione



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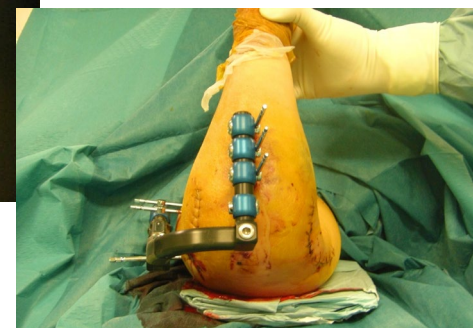
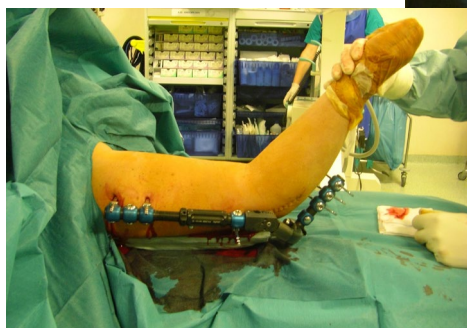
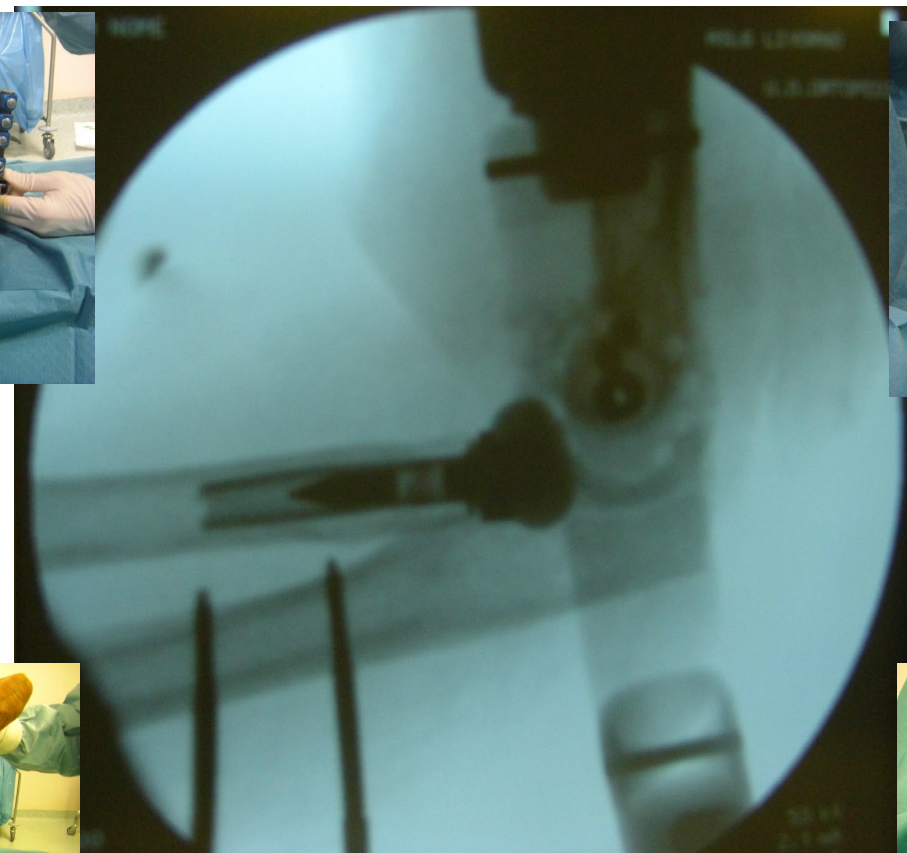
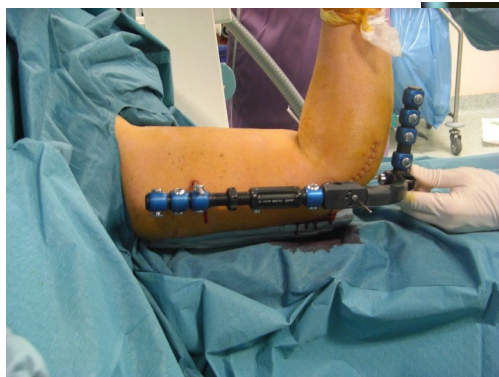


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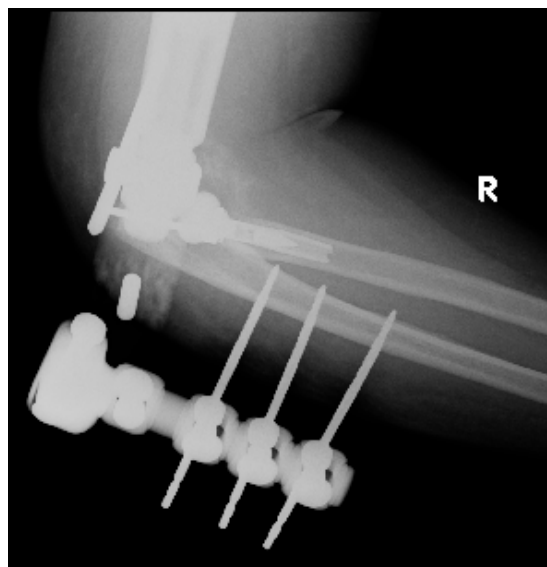
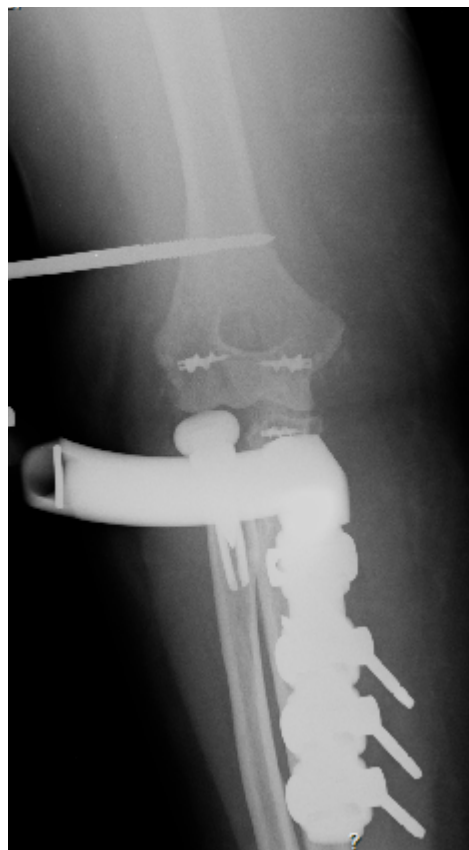
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Fissatore Esterno Articolato





6 sett: rimozione



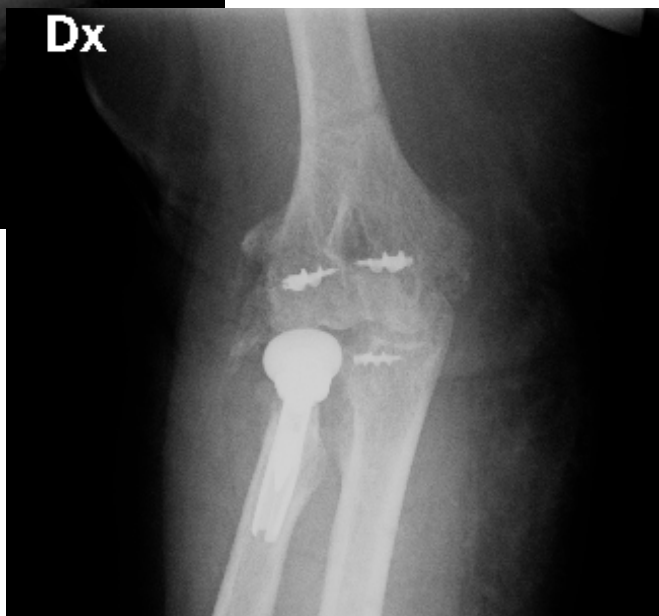


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10 mesi : follow up



Dx





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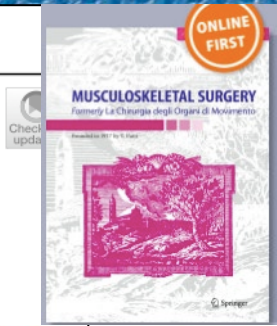
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.M. 21 aa (trauma attrezzo agricolo) Frattura-Lussazione +Monteggia



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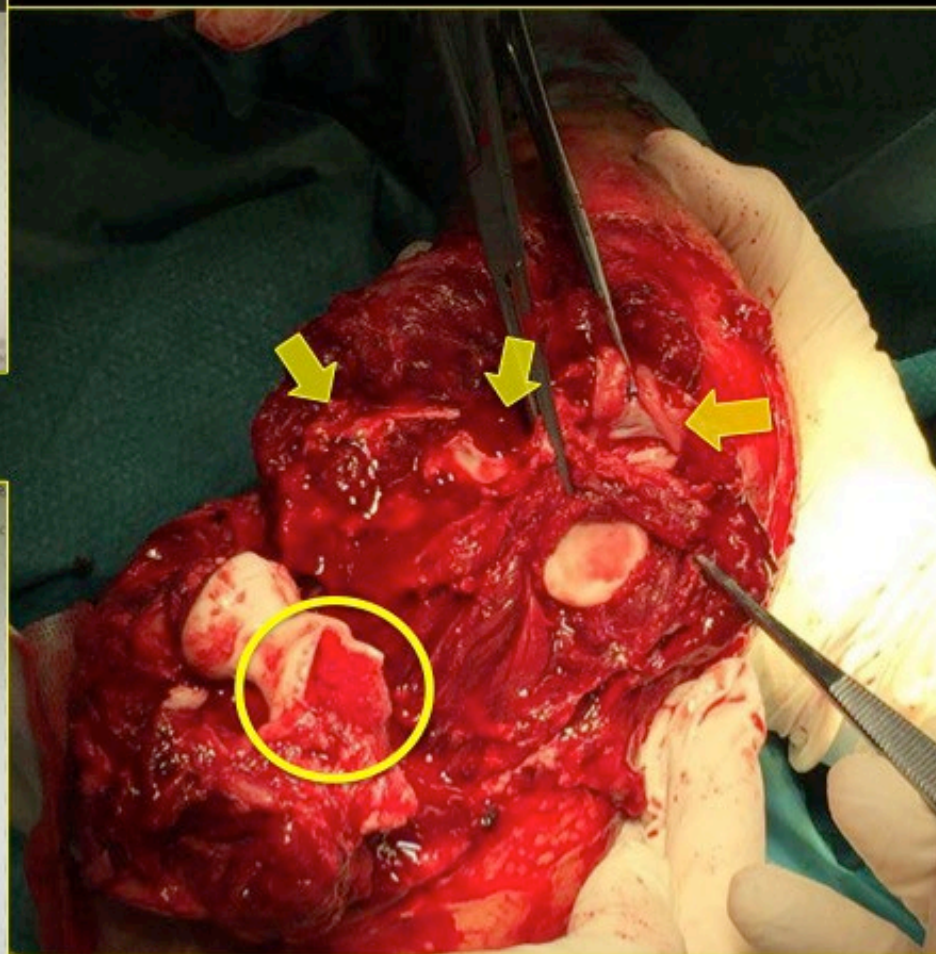
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Politraumatizzato



+ TRAUMA TORACO-ADDOMINALE

ETC: Early total care



FE statica (bloccato a 90° per 3 settimane)



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FOLLOW-UP 3 MESI: artromiolisi

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FOLLOW UP up a 12 MESI





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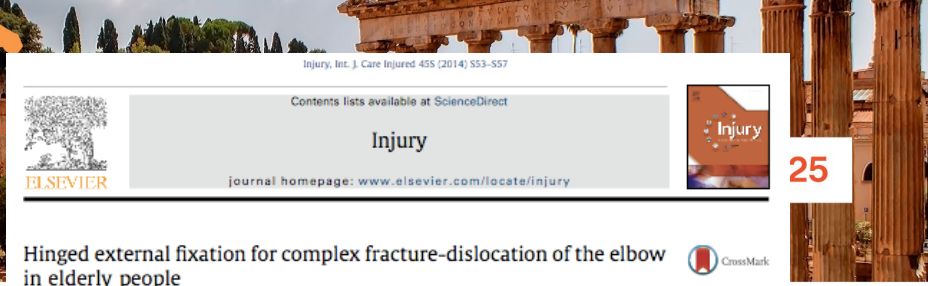
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F.M. 85 aa: Frattura Omero 1.3 C2-C3



Hinged external fixation for complex fracture-dislocation of the elbow in elderly people

P. Maniscalco^a, A.L. Pizzoli^{b,*}, L. Renzi Brivio^b, M. Caforio^{a,**}

^a Department of Orthopaedics and Traumatology, Guglielmo da Saliceto Hospital, Piacenza, Italy
^b Department of Orthopaedics and Traumatology, C. Poma Hospital, Mantua, Italy

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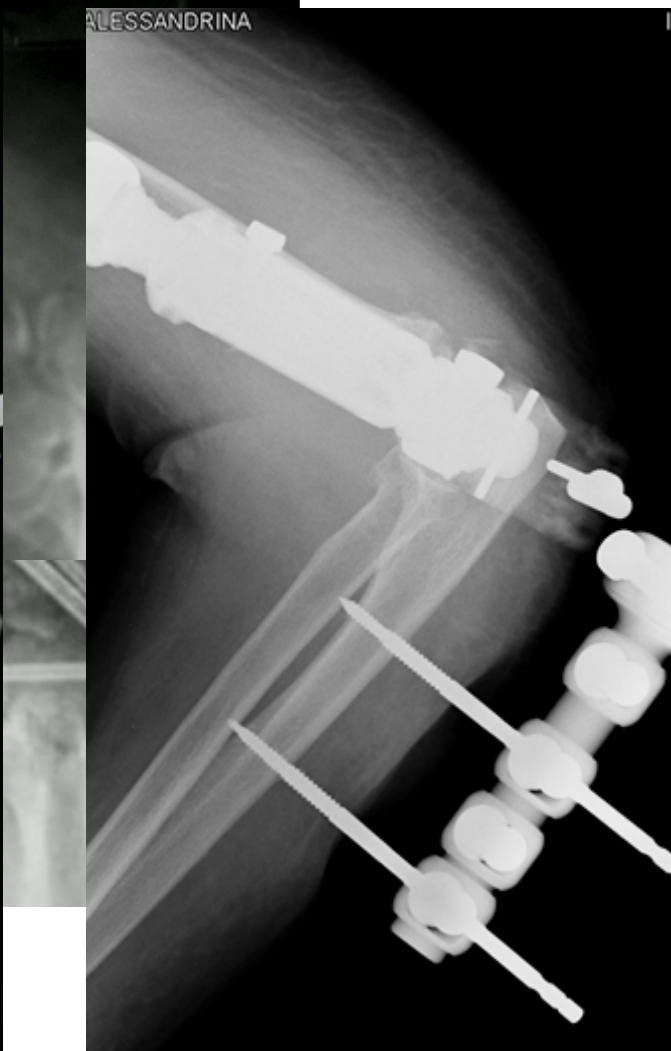


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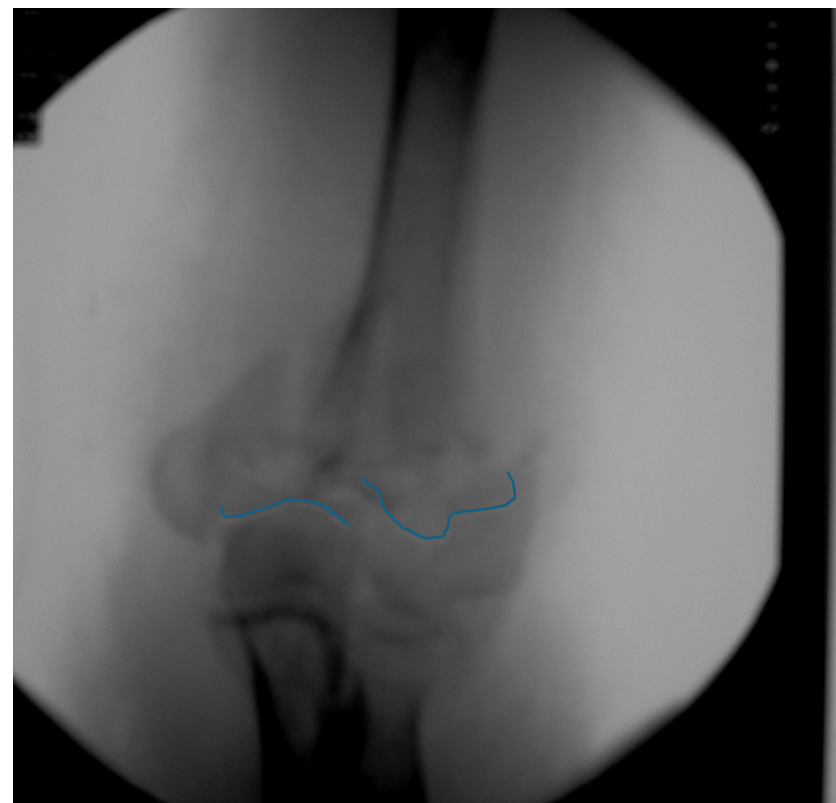


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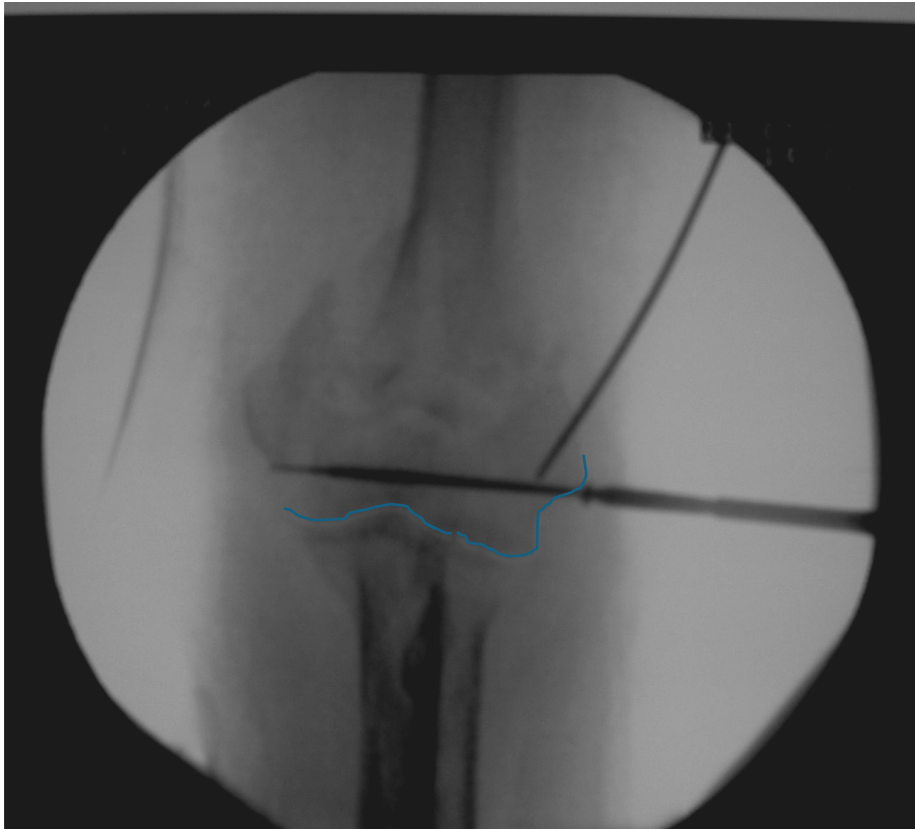


Tecnica chirurgica dei 3 passi: Ligamentotaxis



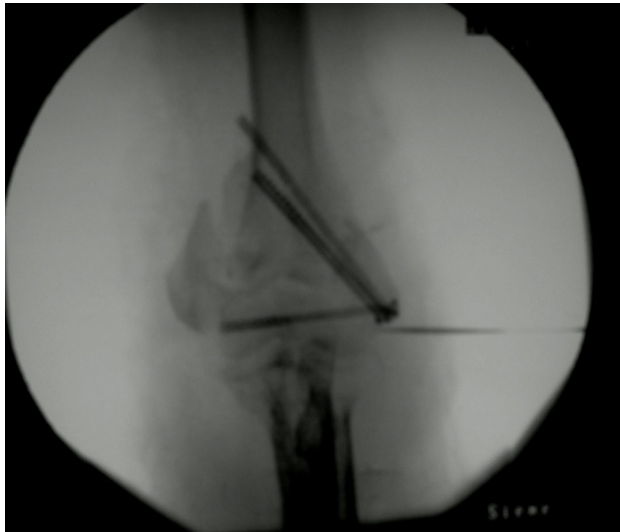


Tecnica chirurgica dei 3 passi: Riduzione e Sintesi percutanea





Tecnica chirurgica dei 3 passi: Applicazione fissatore (centro rotazione)



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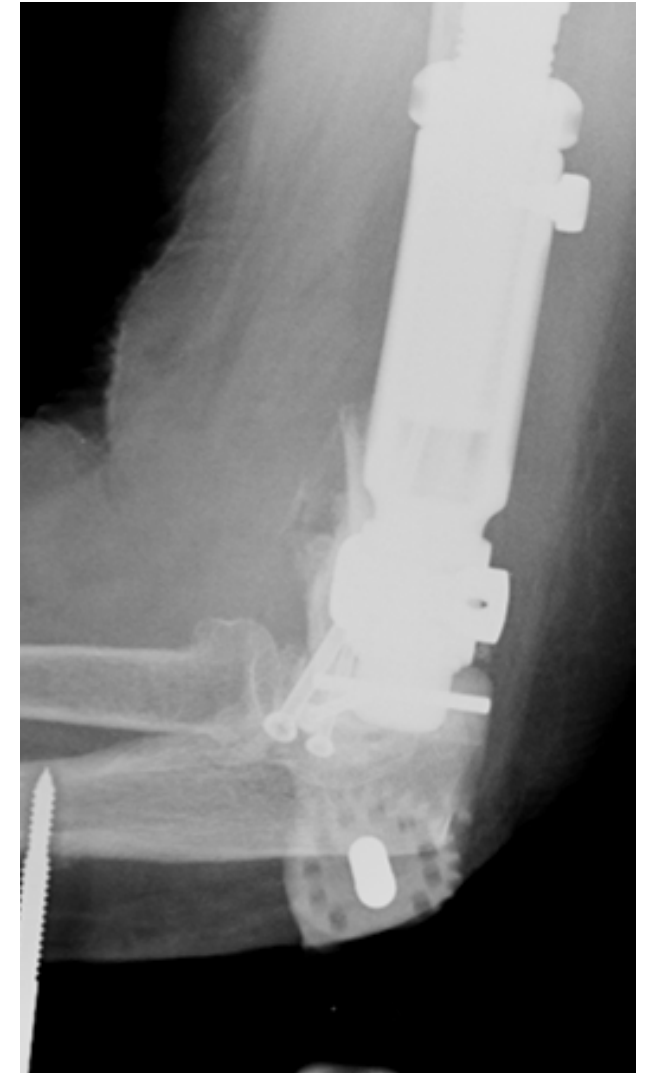


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Controllo a 60 giorni



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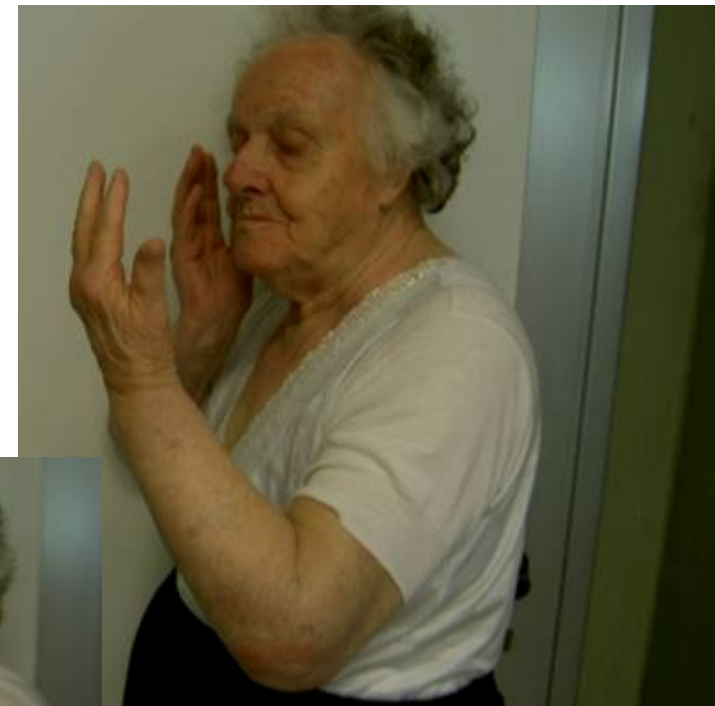
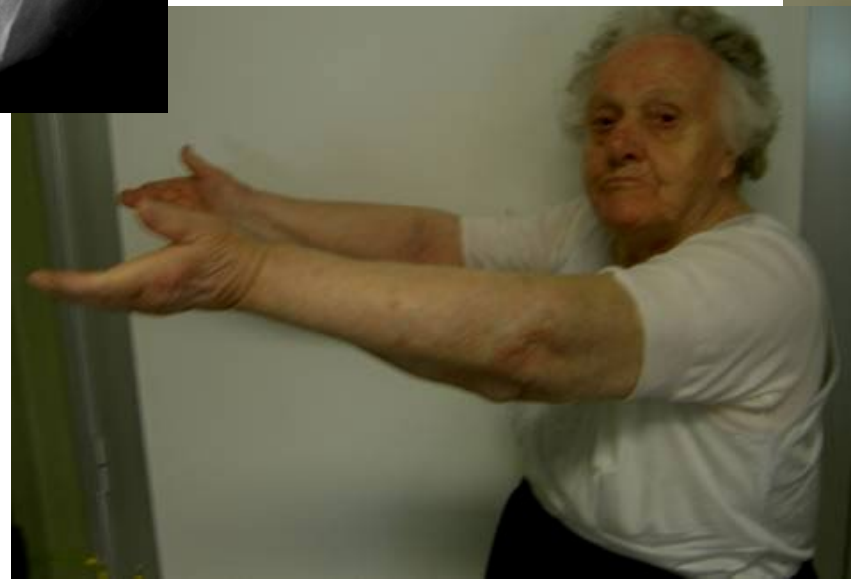
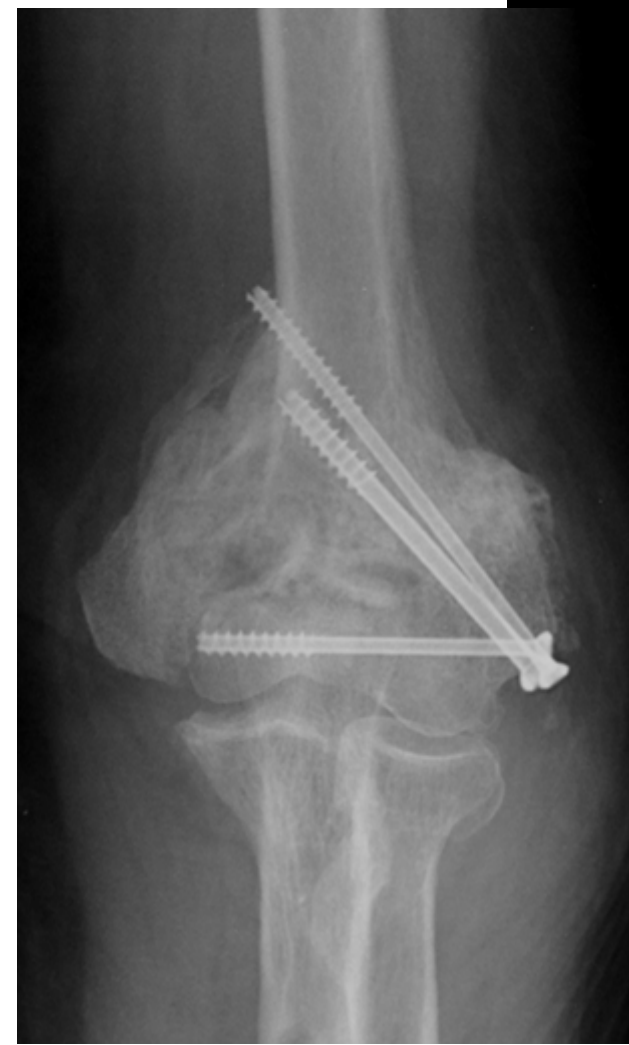


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Controllo a 90 giorni





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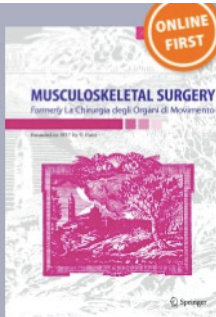
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- FRATTURE COMMINUTE IN OSTEOPOROSI
- **ESITI FRATTURE INSTABILI (rigidità/instabilità)**

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G.D. 45 anni Rx trauma



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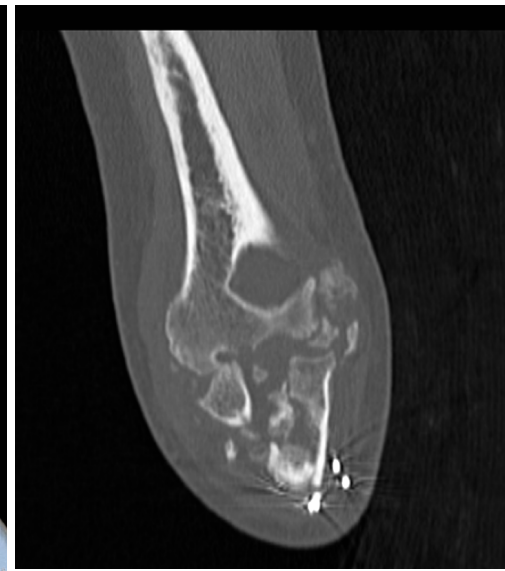
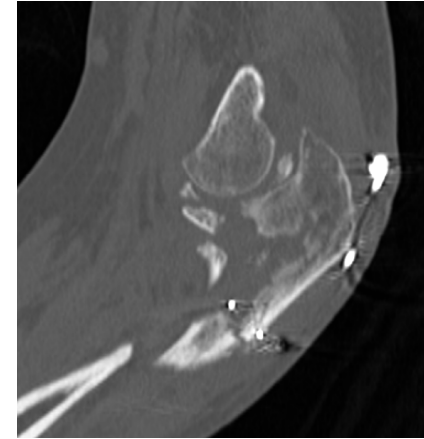
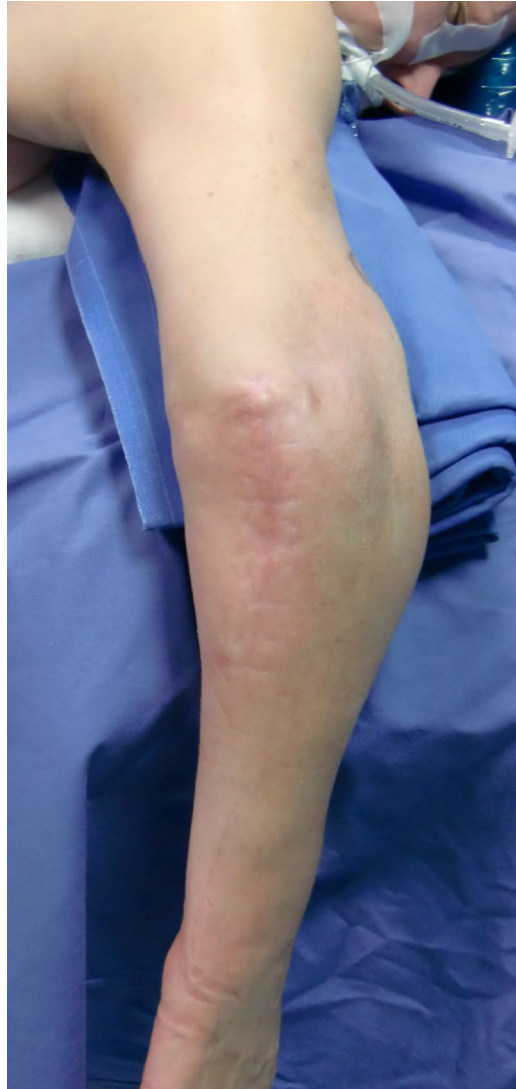


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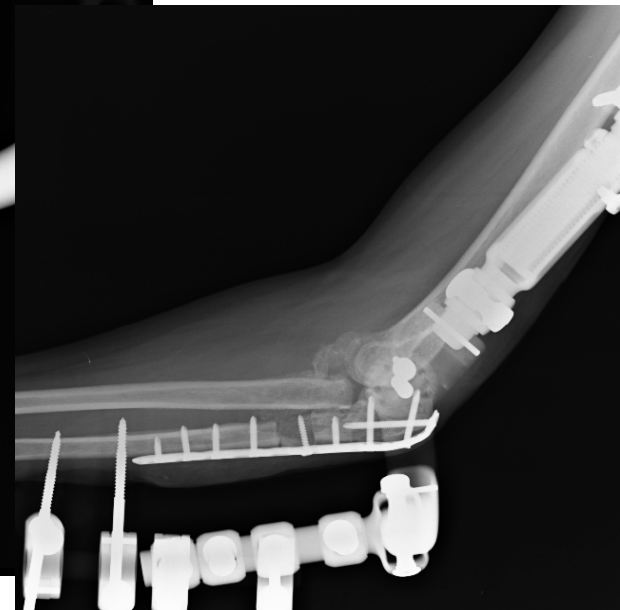
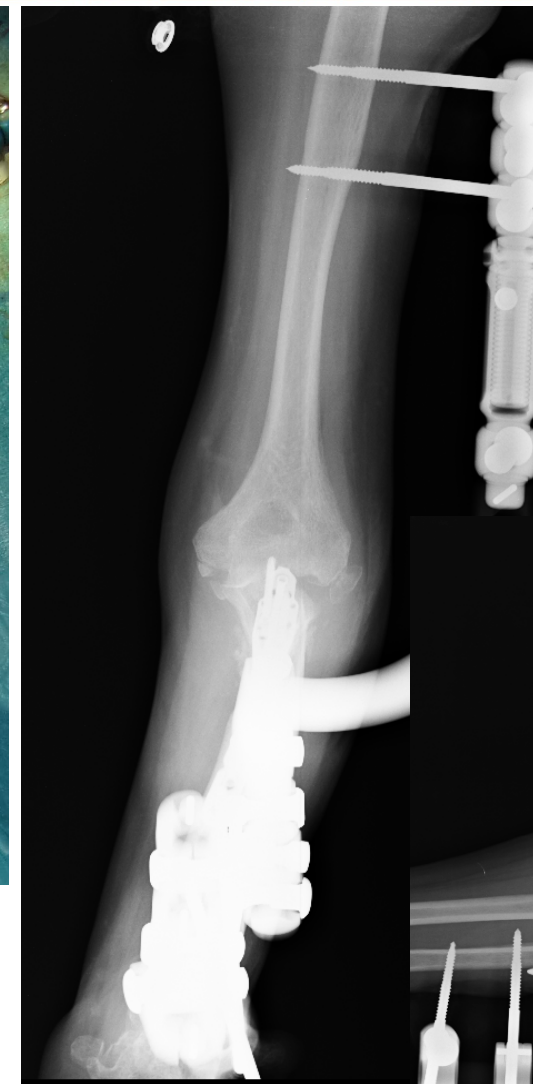
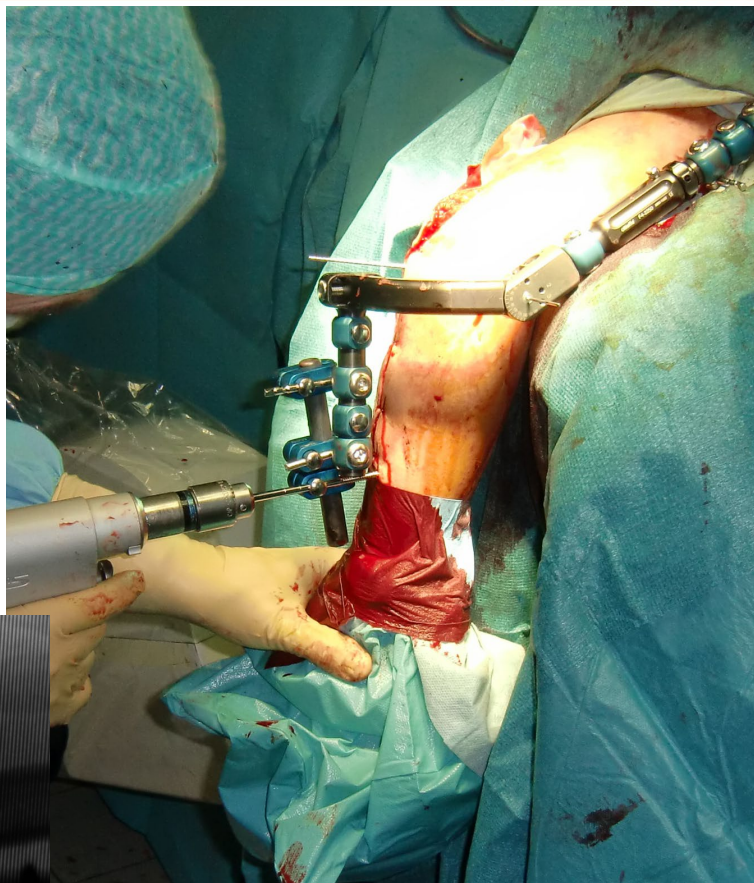
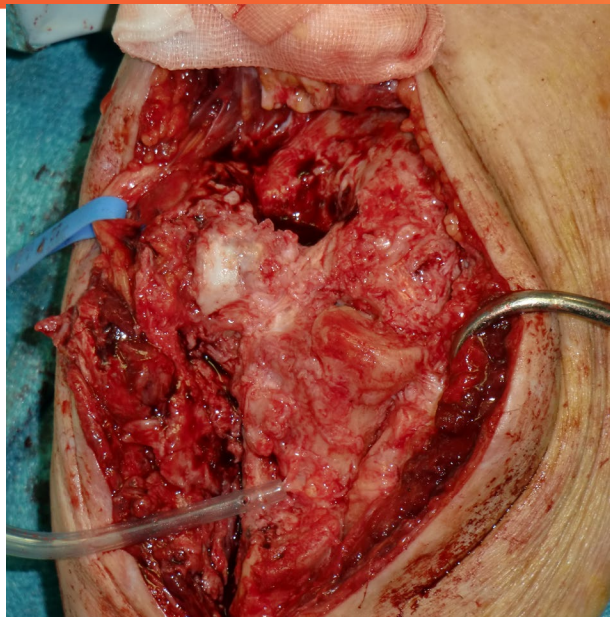
Rx, CT e clinica a 3 mesi



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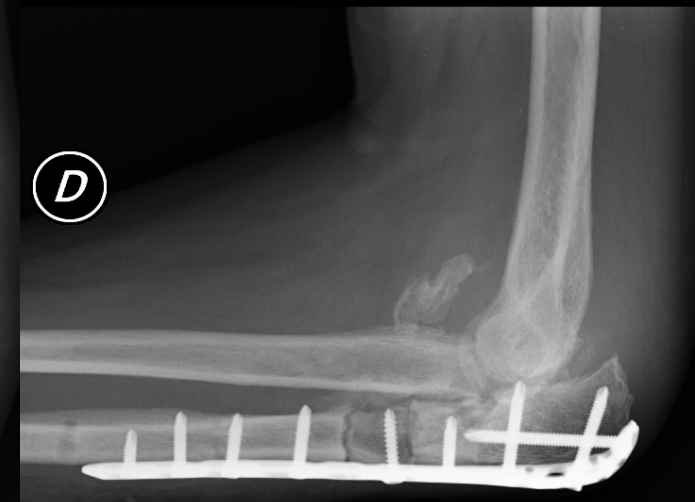
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Controllo a 6 mesi

Instit:



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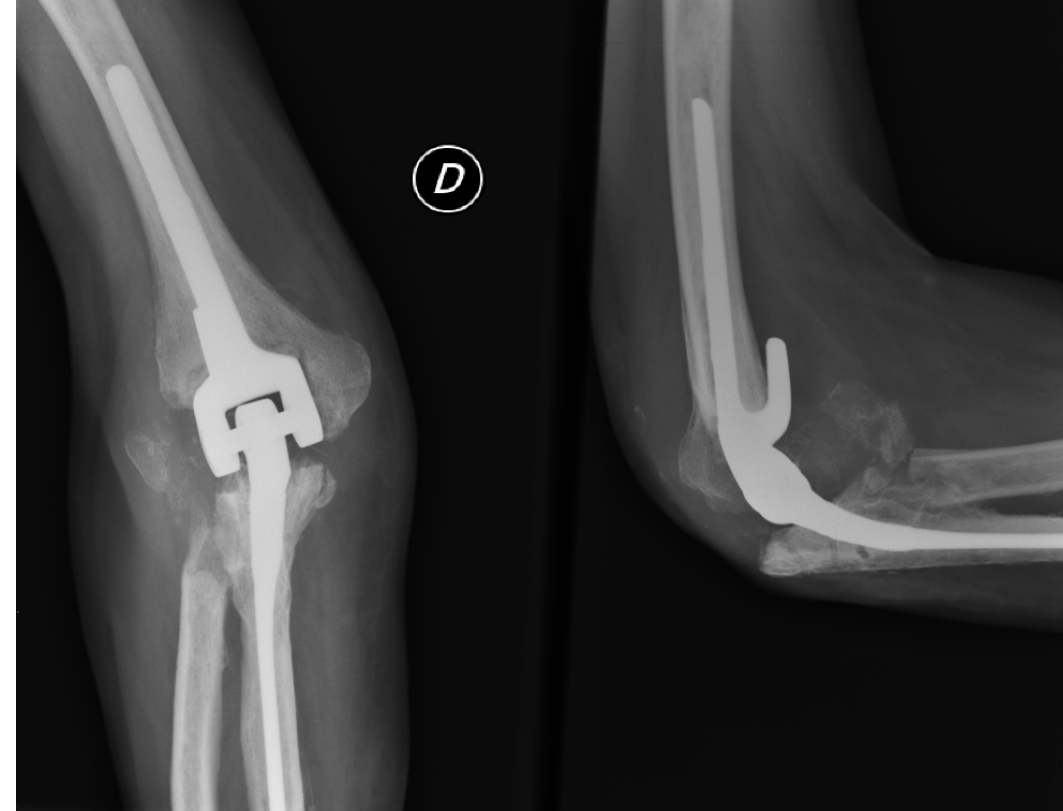
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Controllo a 5 anni





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THM: FISSAZIONE ESTERNA ARTICOLATA NELLE FRATTURE **COMPLESSE** DEL GOMITO:

- FISSATORE ARTICOLATO GOMITO :

Non è la Panacea di tutti i casi COMPLESSI ma SPESSO utile
Nel paziente ad alto rischio (POLITRAUMA o PLURIPATOLOGICO)

- CURVA APPRENDIMENTO:

Tecnica di Applicazione + Follow-up personalizzato (FKT team)

- PAZIENTE ANZIANO O GRANDE ANZIANO

F.E.A. alternativa a ORIF o TEA in OSSO osteoporotico! Meglio del Bag of Bones!

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GRAZIE