

Distal Humerus Fractures

Utku KANDEMIR, MD

Professor

University of California, San Francisco



Goal of Treatment

Return to prior **FUNCTIONAL** level

=

Early **UNRESTRICTED** ROM

=

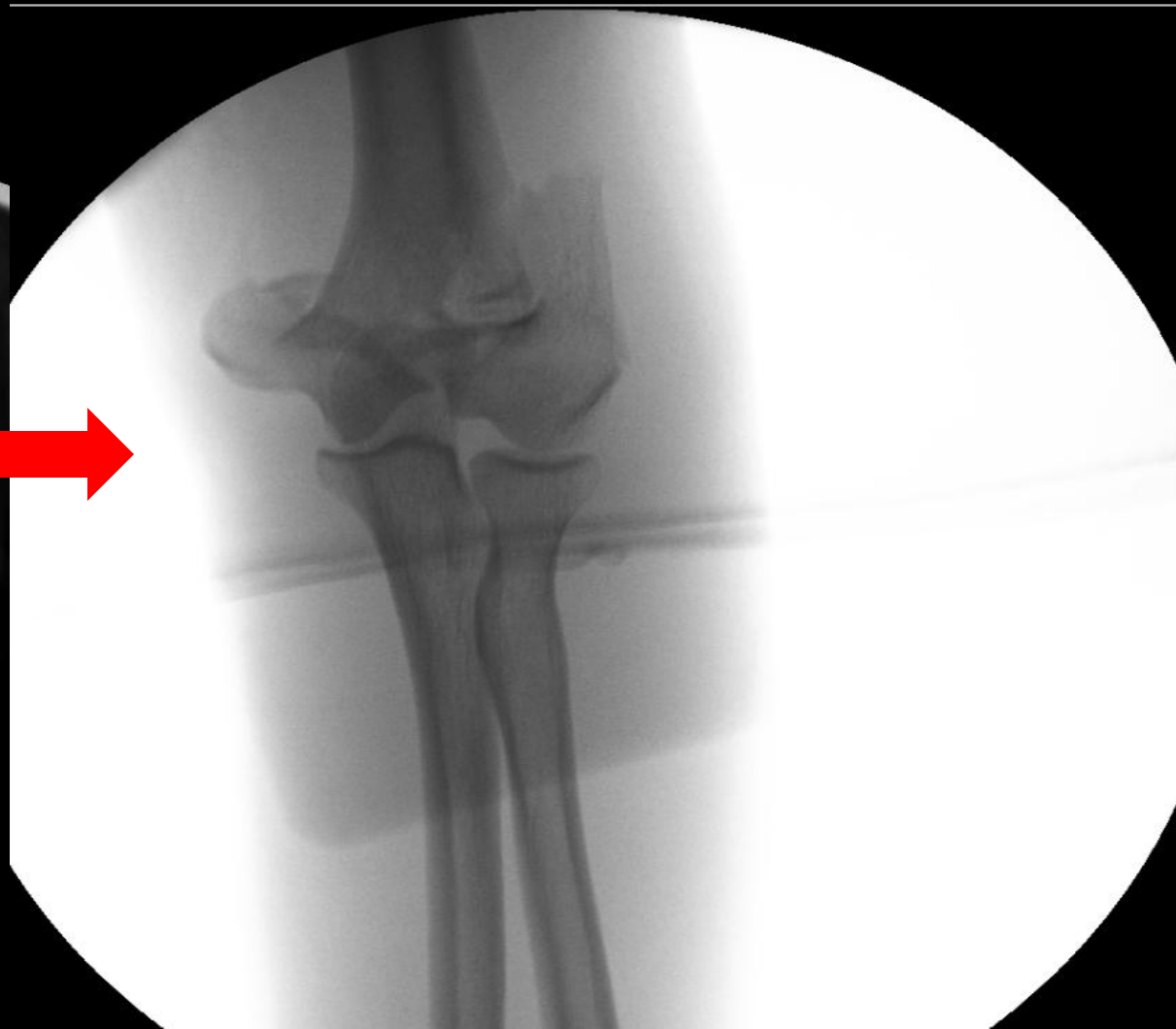
STABLE fixation (ORIF)

When CT scan indicated ?

- Suspicion of coronal fracture lines
- Severe comminution: fixable vs. unfixable?
- Suspicion of injury additional to distal humerus (coronoid fx)



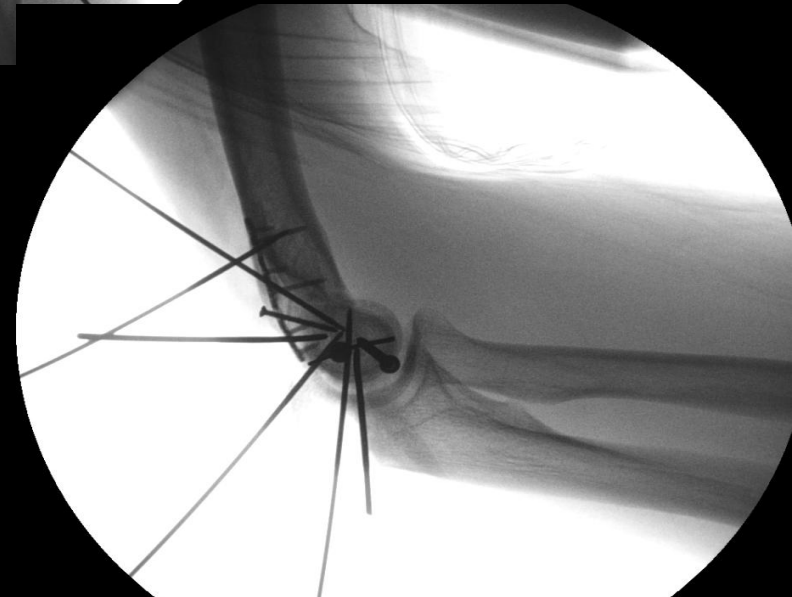
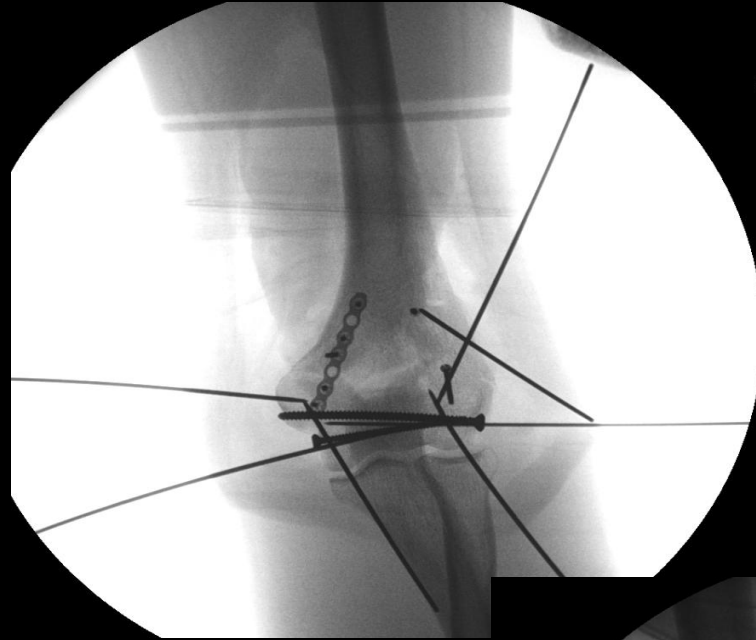
30 y/o, Traction view in OR



30 y/o, Reduction & Provisional fixation



(17:17)



30 y/o

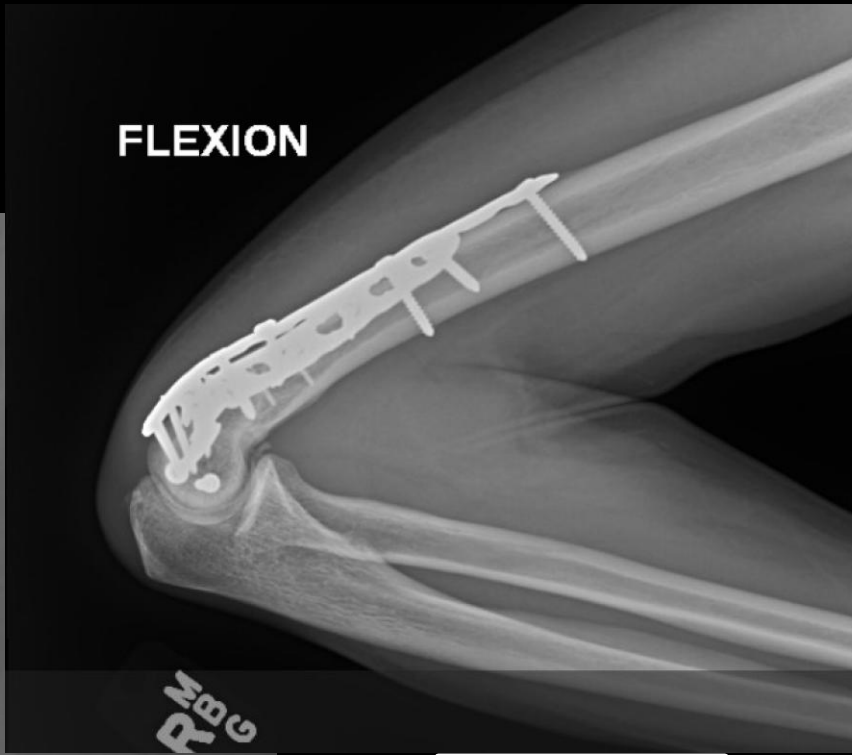


(19:16)

30 y/o, postop



1 yr Follow up



Flexion

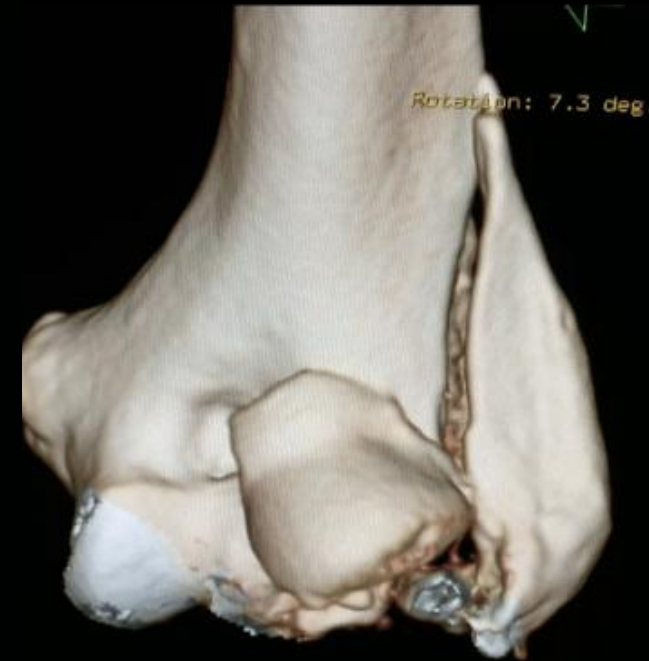


Extension

49 y/o male, bike vs. auto



49 y/o

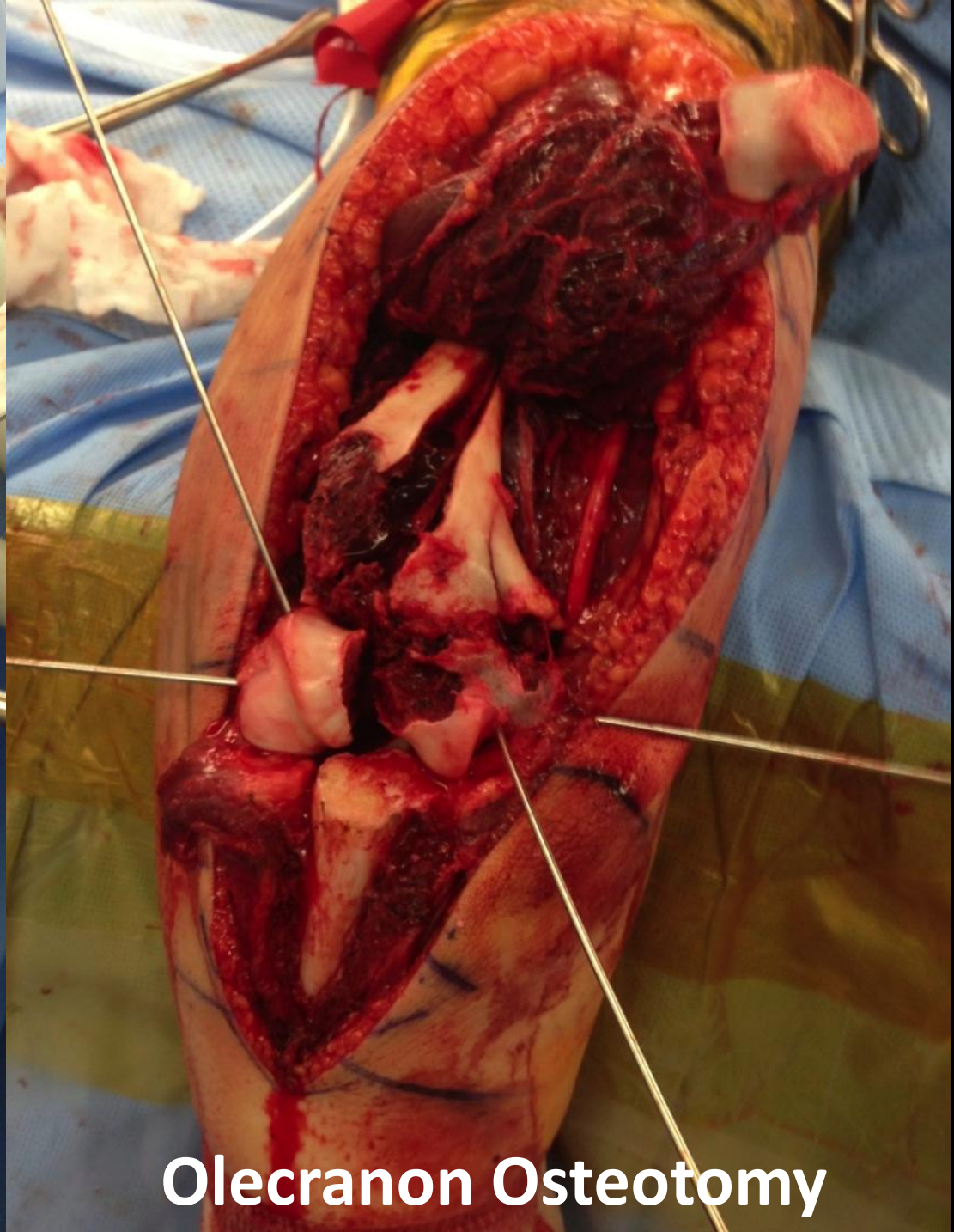
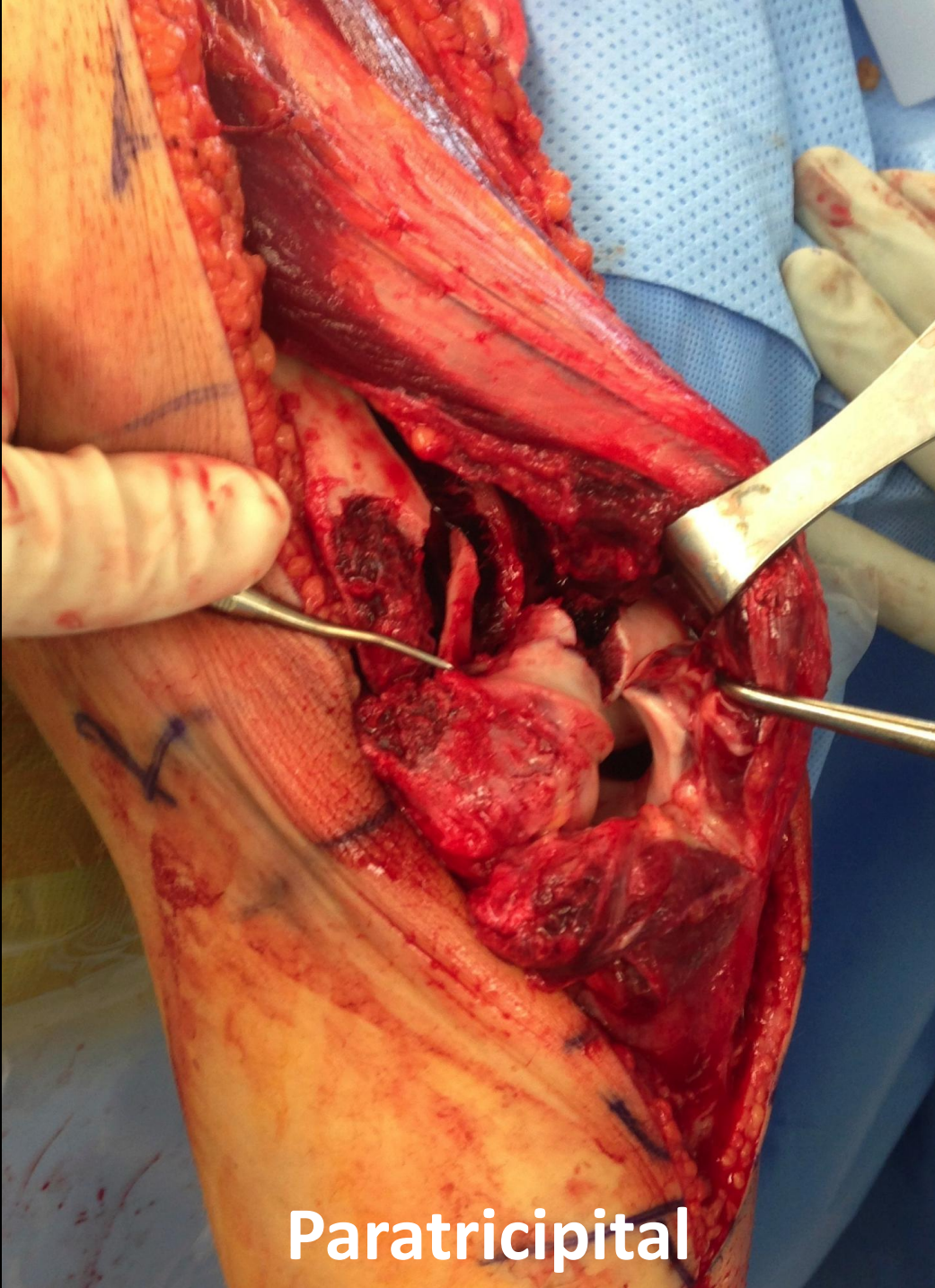


Distal Humerus Approaches

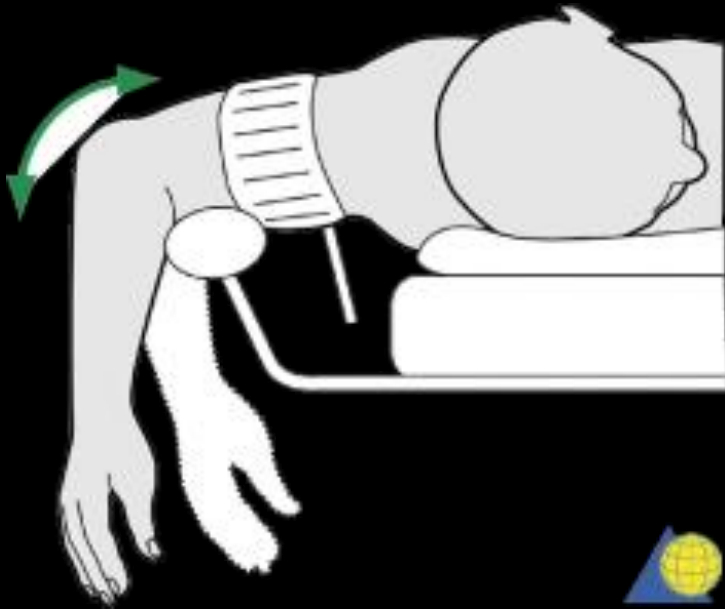
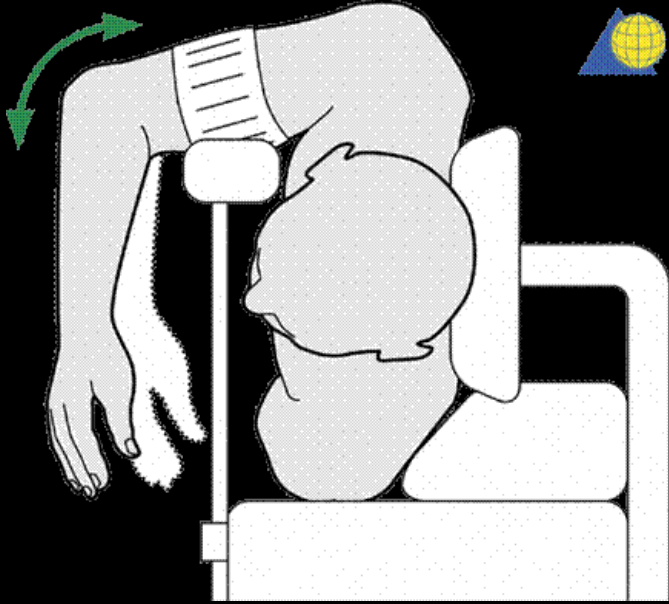
- Paratricipital (Alonso-Lames)
- Olecranon Osteotomy
 - Standard
 - Anconeus Flap Transolecranon Osteotomy
- Triceps Splitting (Campbell)
- Triceps-Reflecting (Bryan-Morrey)
- Triceps Reflecting Anconeus Pedicle (TRAP)

Distal Humerus Approaches

- ▣ Paratricipital (Alonso-Lames)
- ▣ Olecranon Osteotomy
 - Standard
 - Anconeus Flap Transolecranon Osteotomy
- ▣ Triceps Splitting (Campbell)
- ▣ Triceps-Reflecting (Bryan-Morrey)
- ▣ Triceps Reflecting Anconeus Pedicle (TRAP)



Positioning



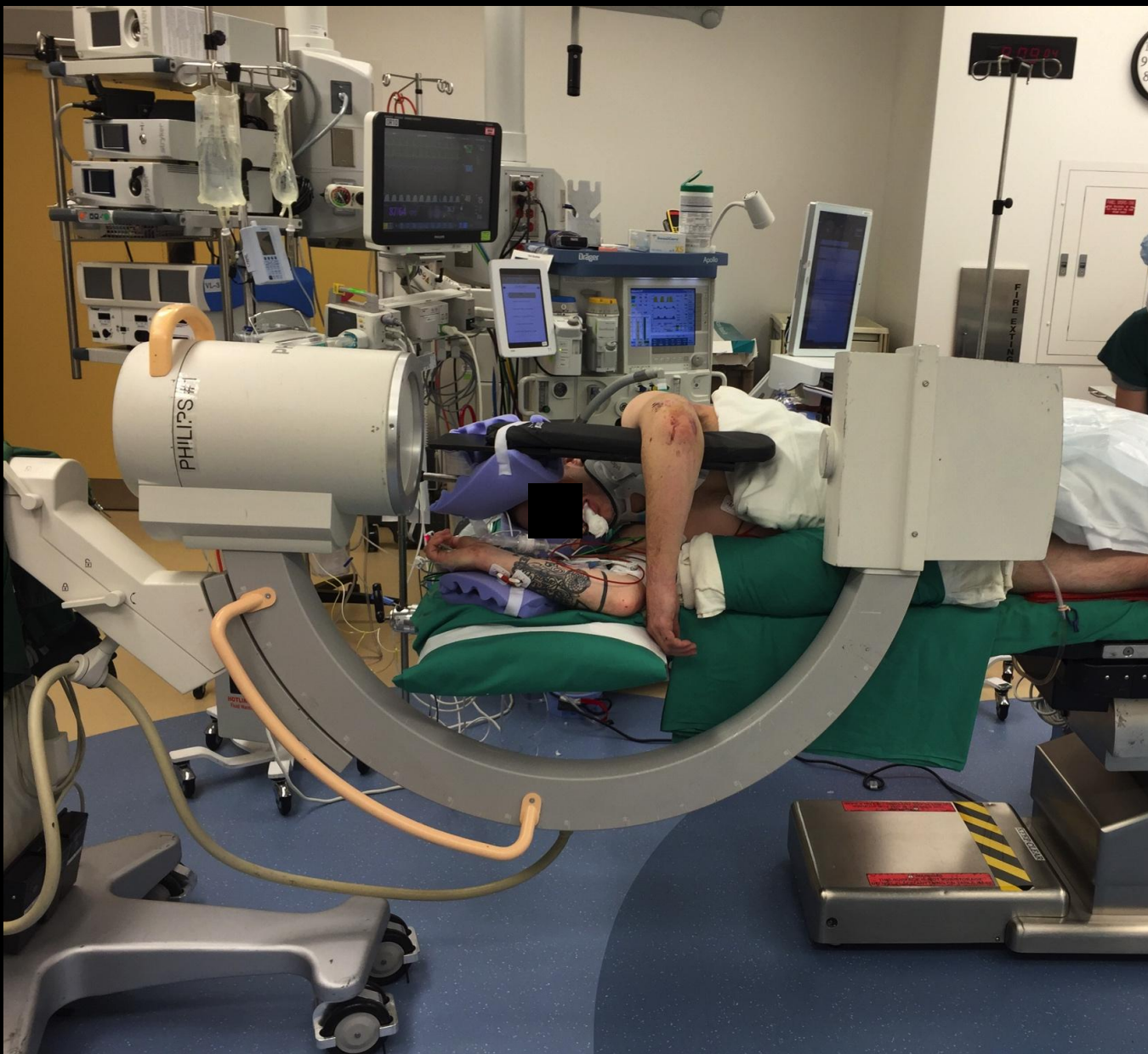
Positioning & Set up



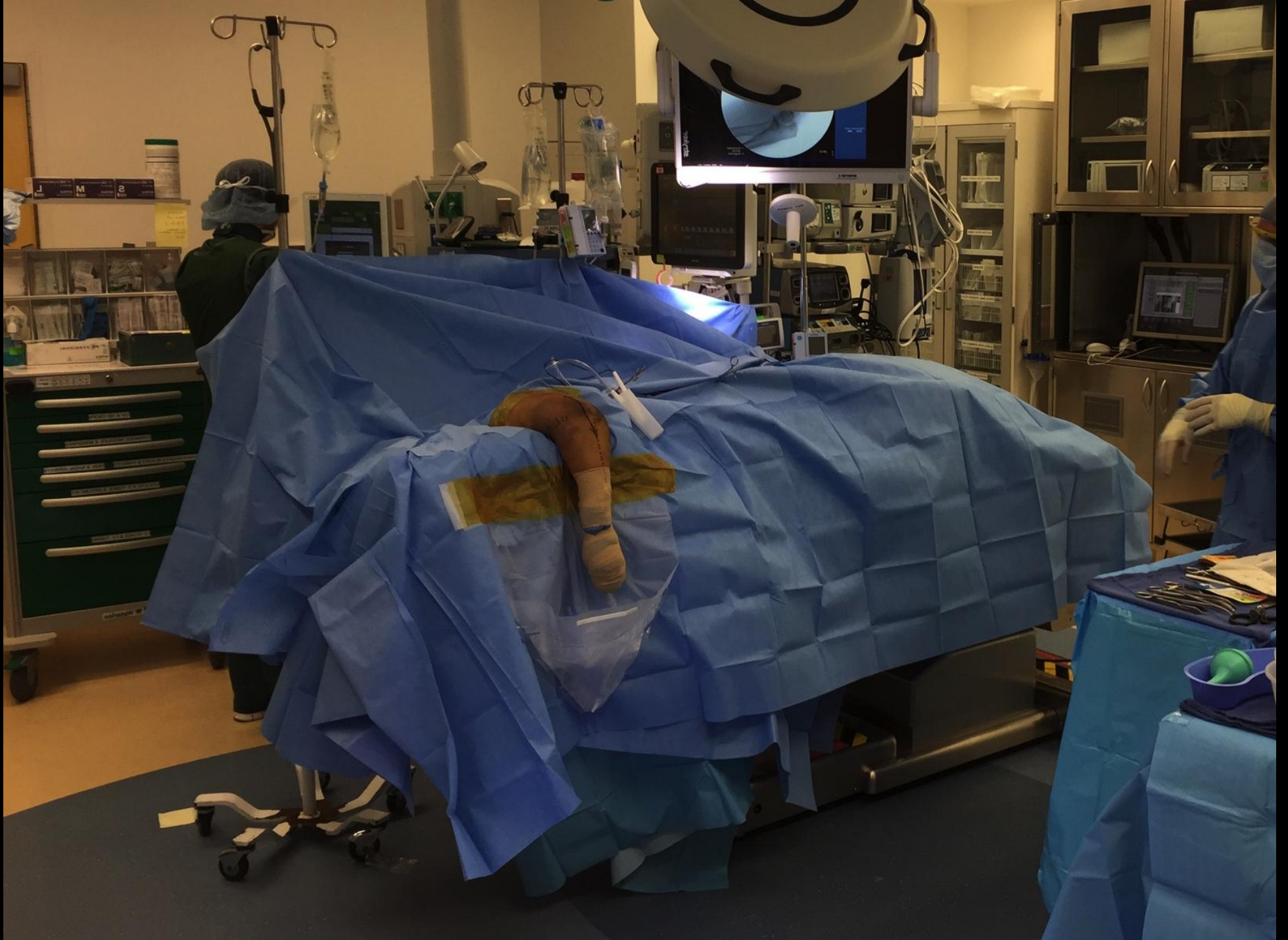




JTKU







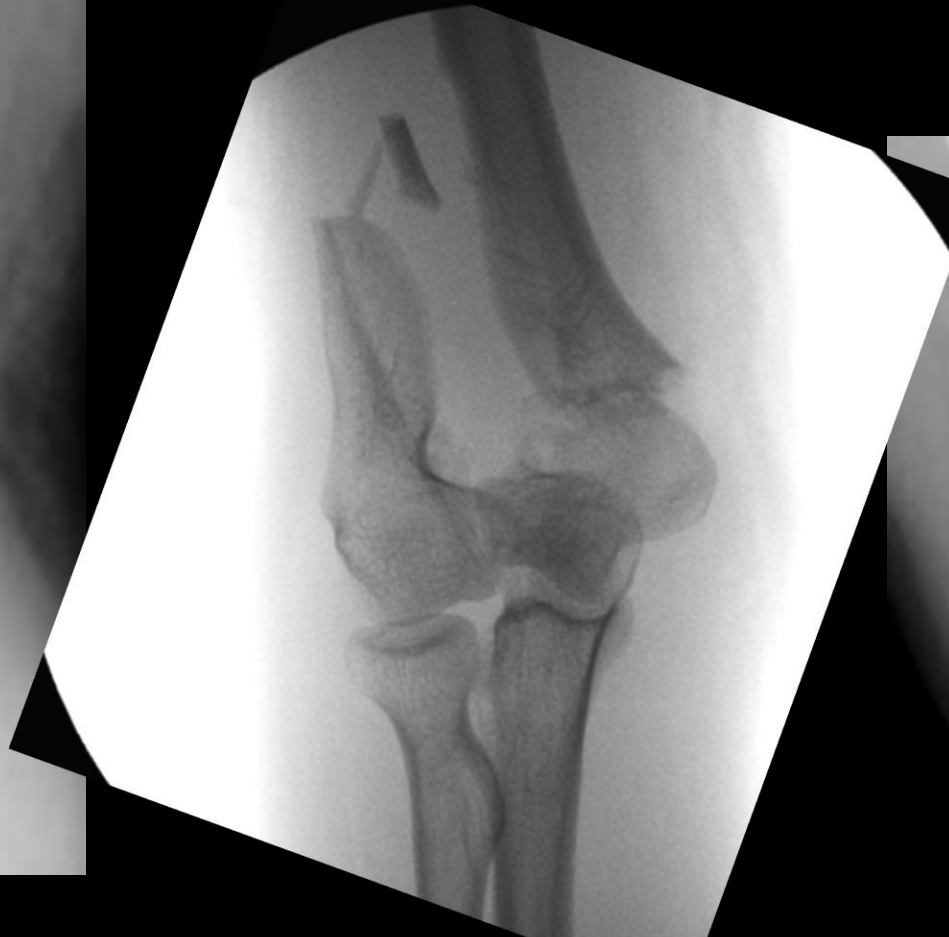




Reduction

Reduction

- Articular 1st vs. easy column 1st?



Reduction



10



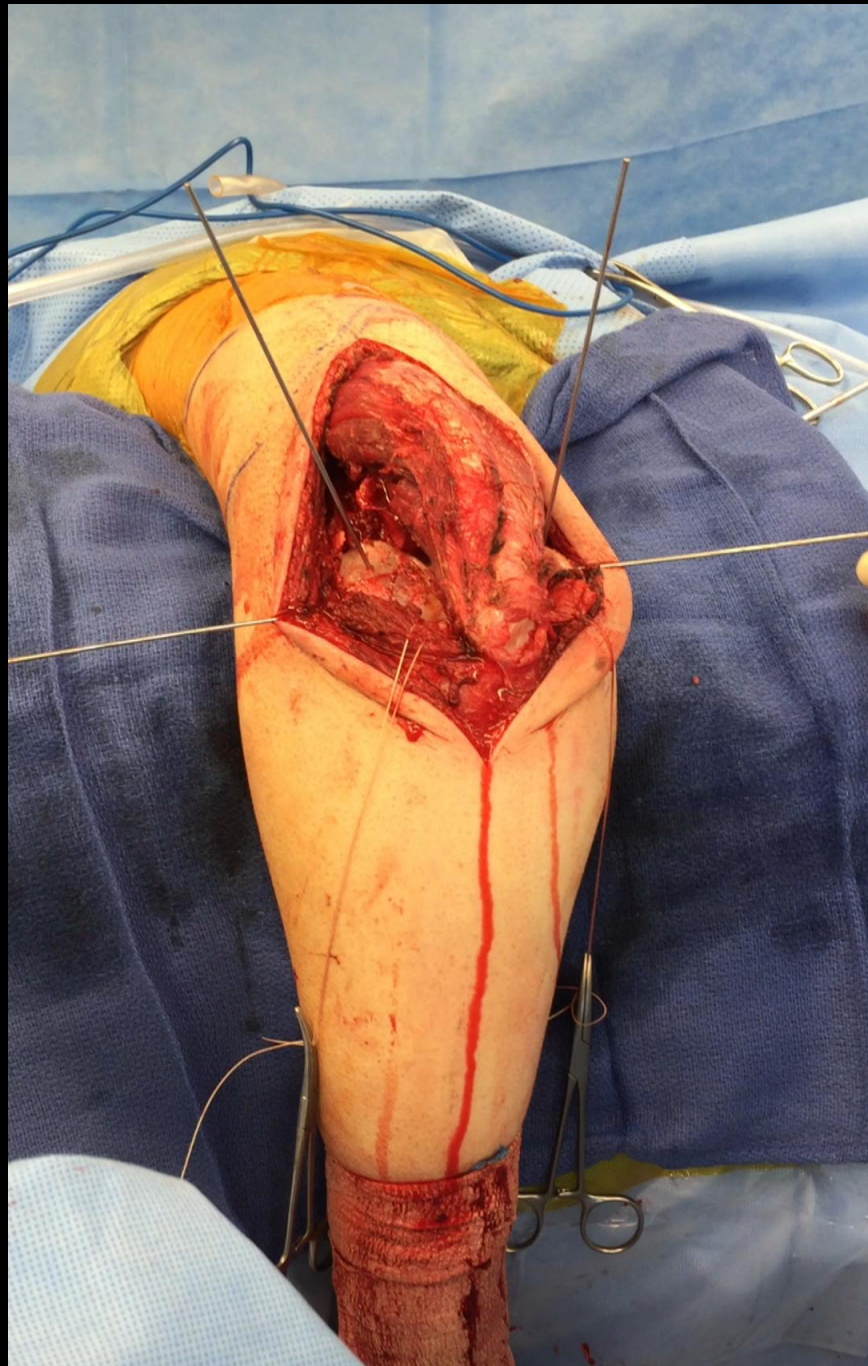
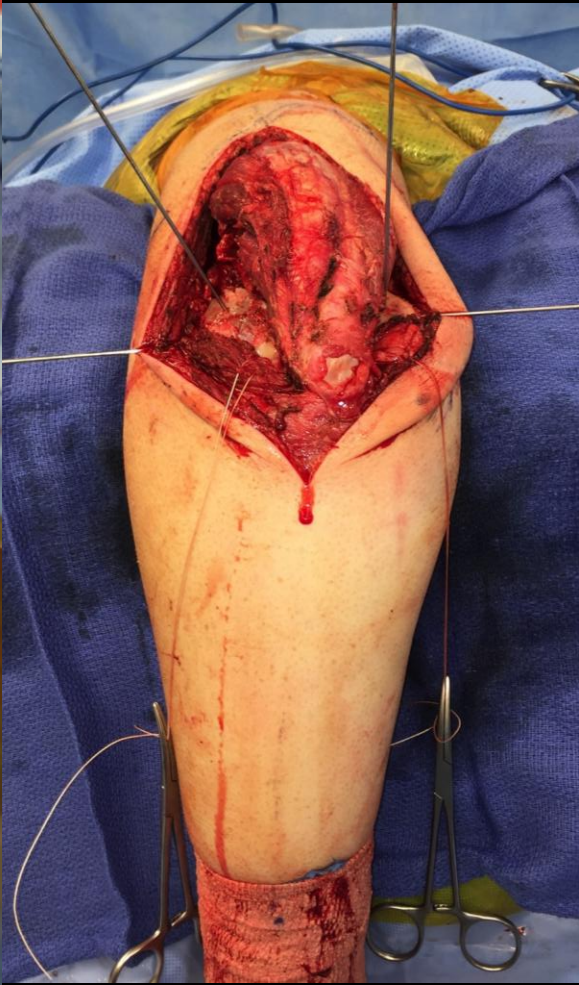
11

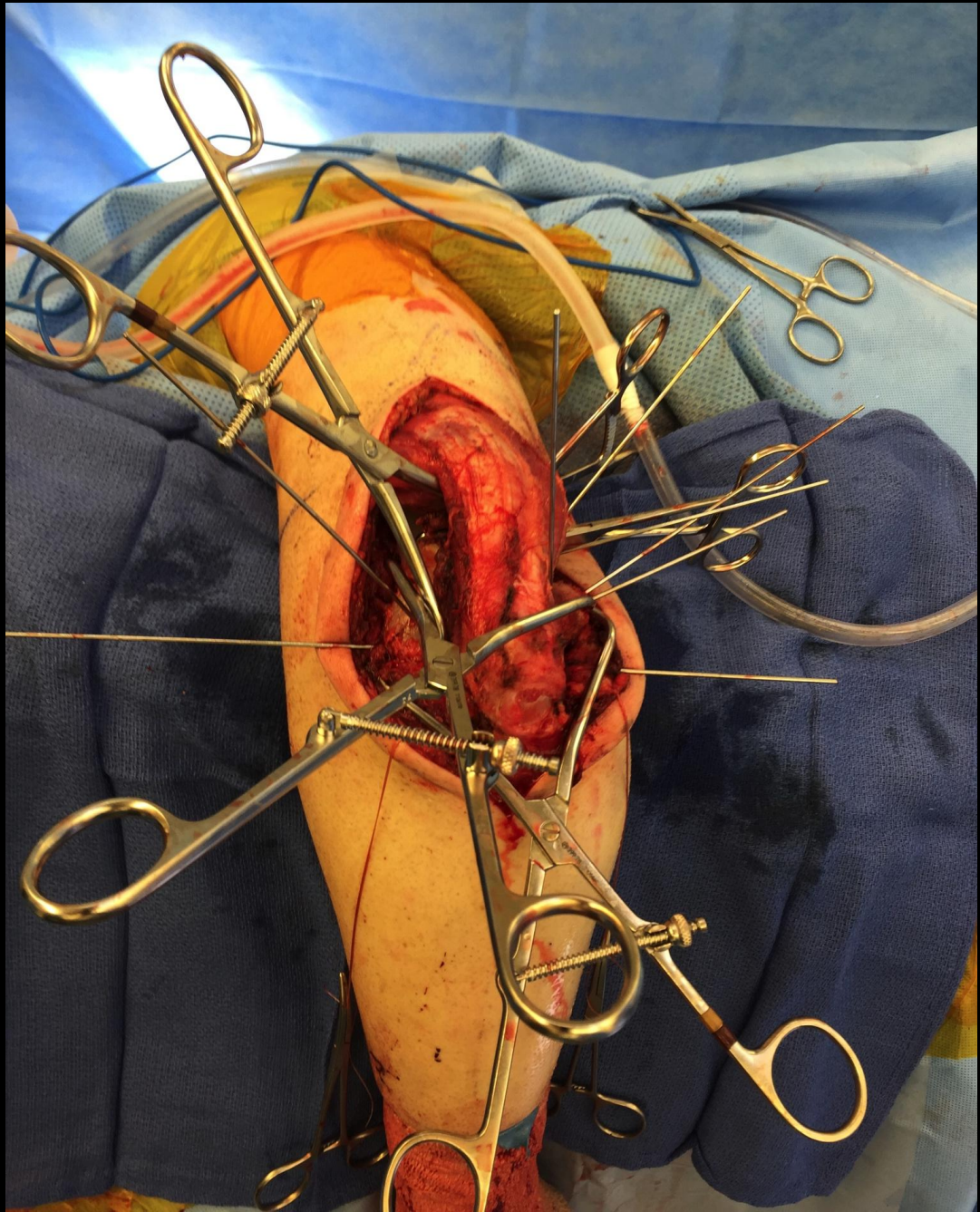


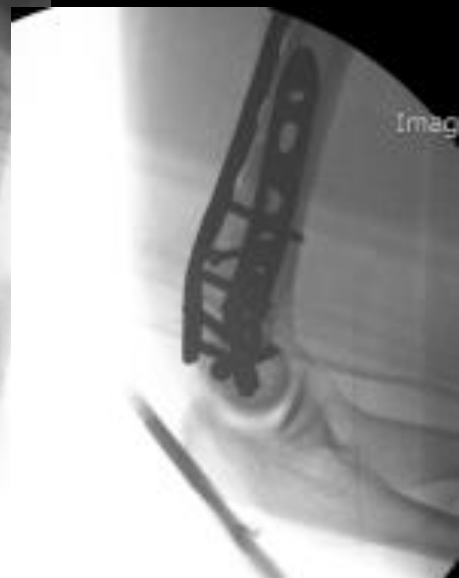
Image



Image

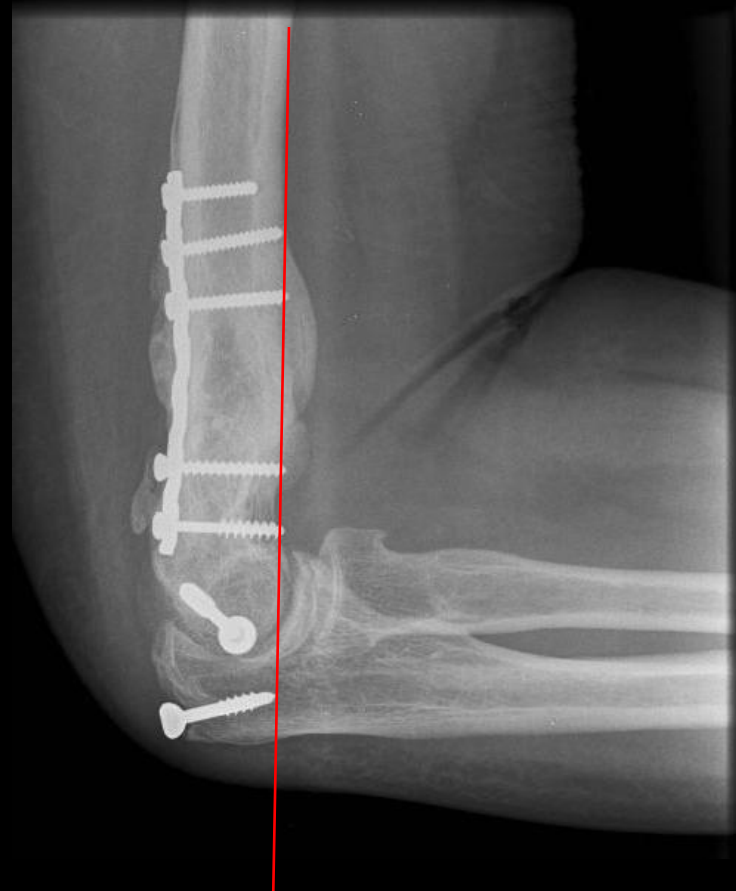
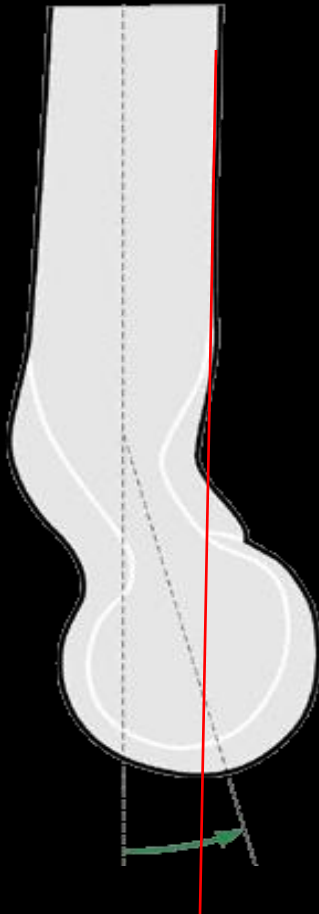


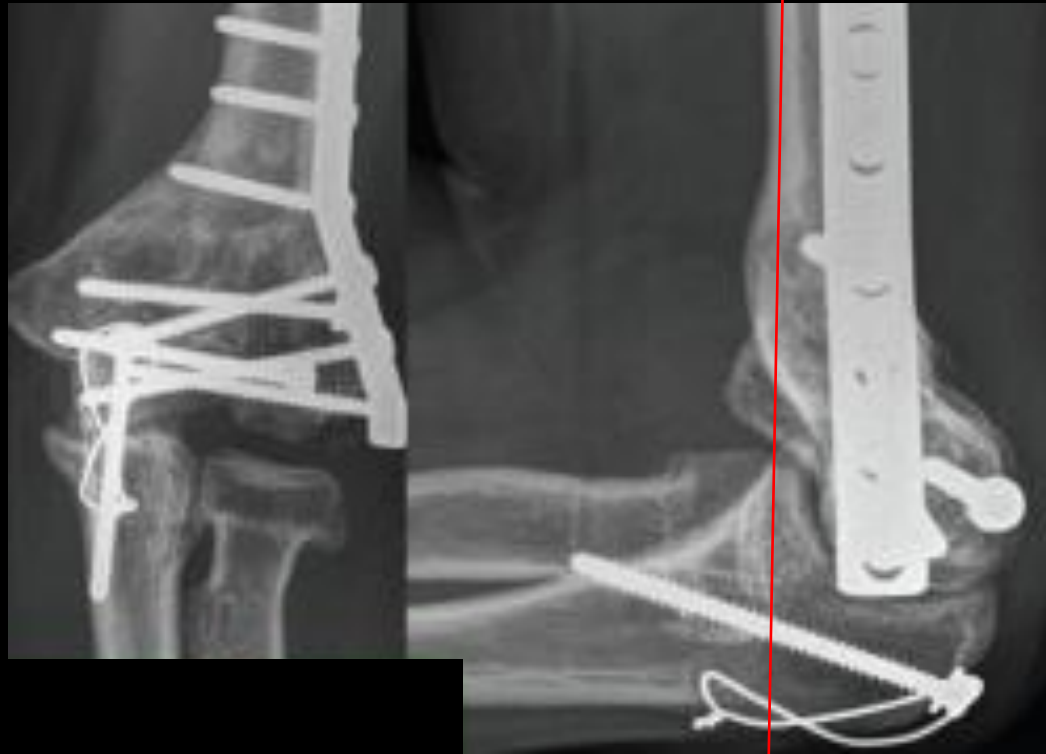




Assessment of Reduction

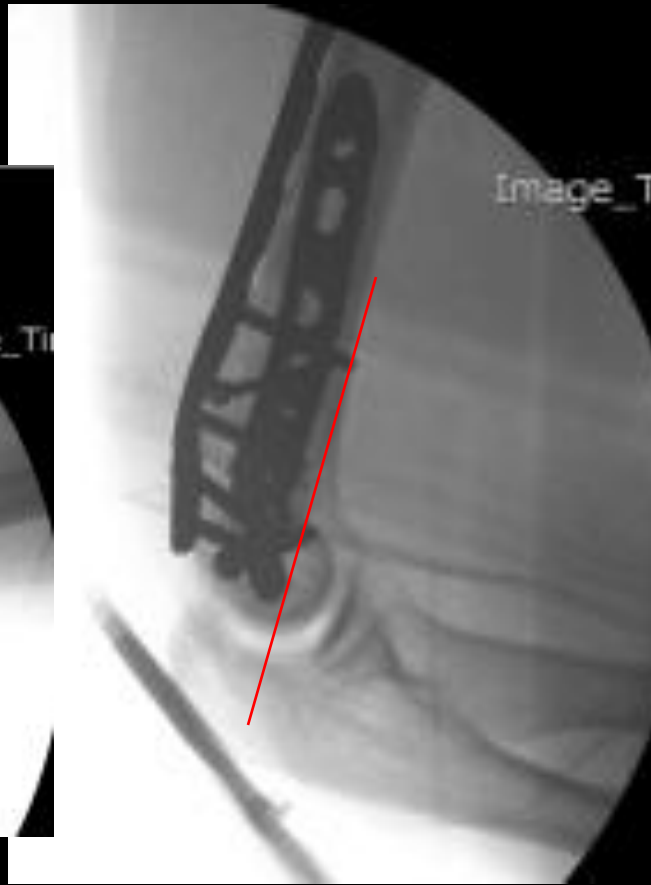
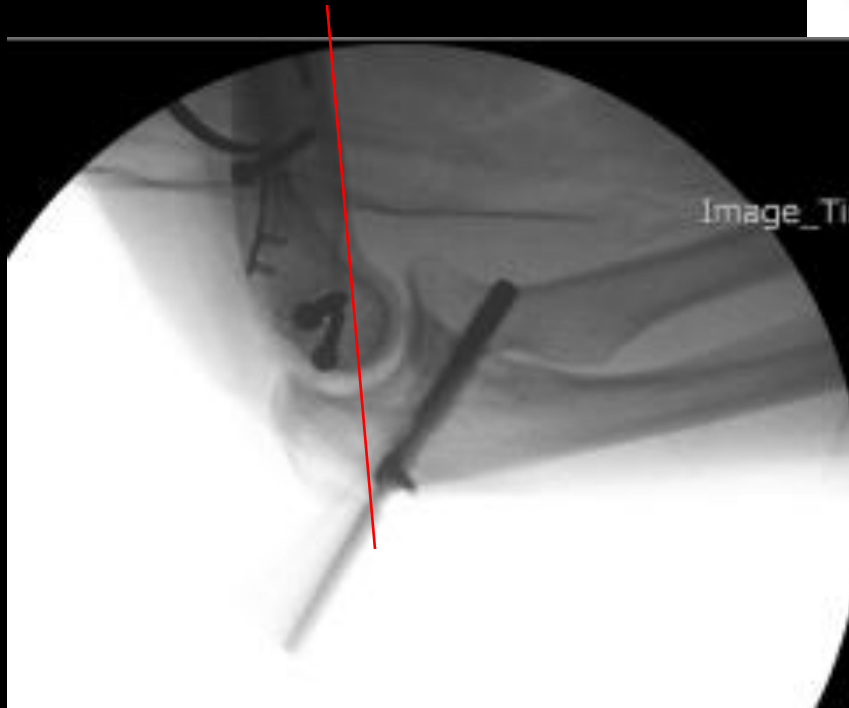
- How to avoid extension malreduction ?

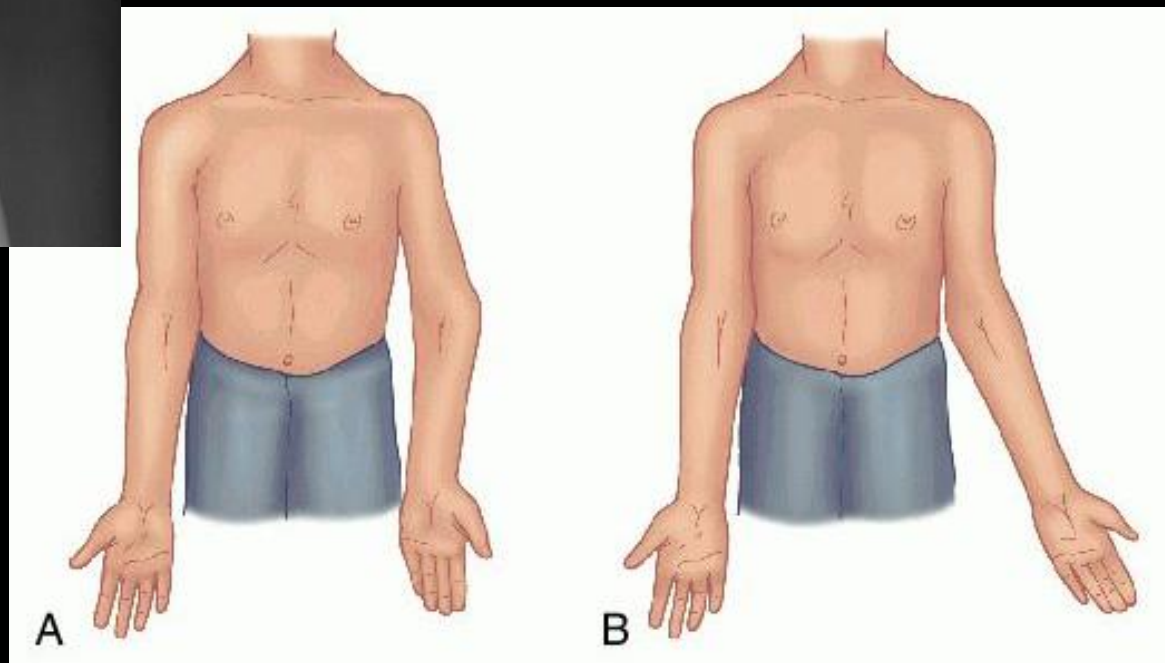
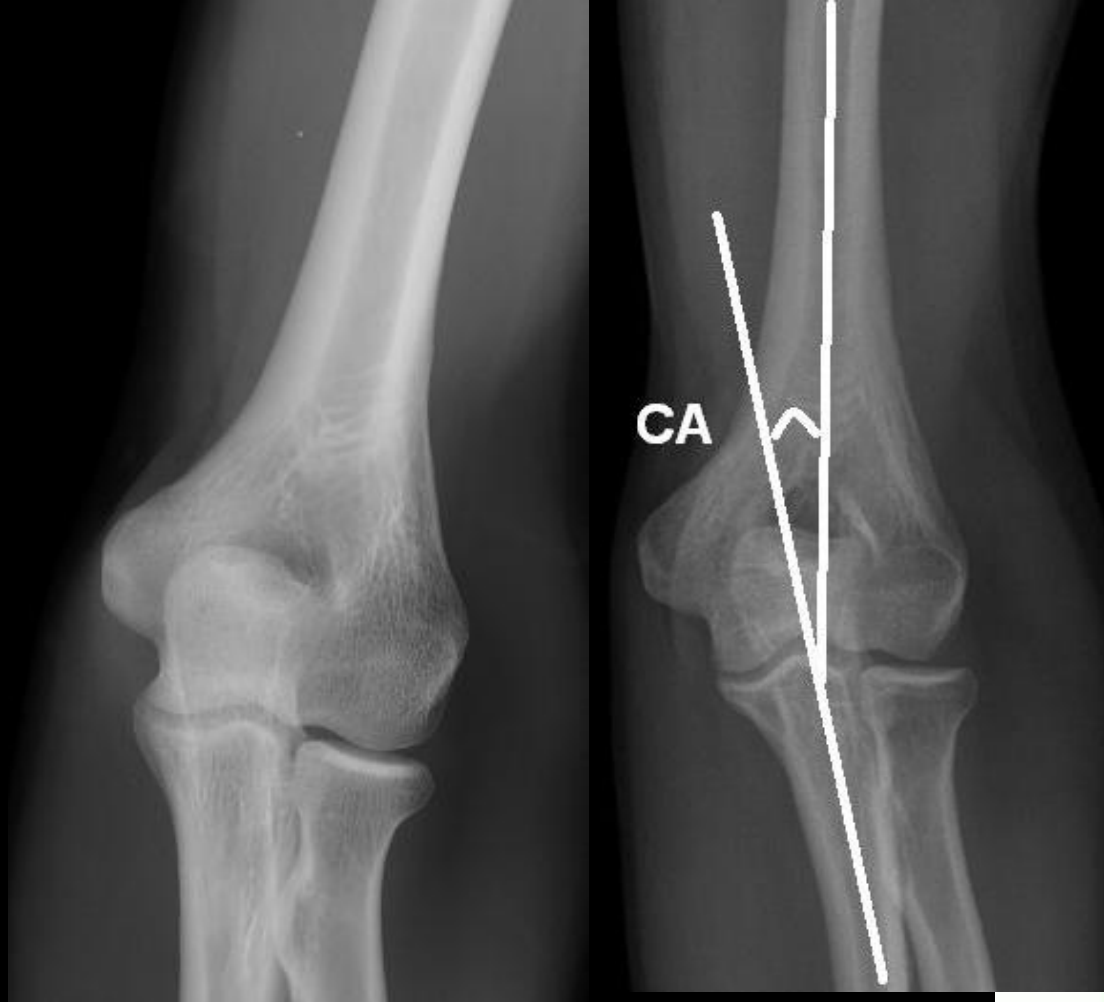


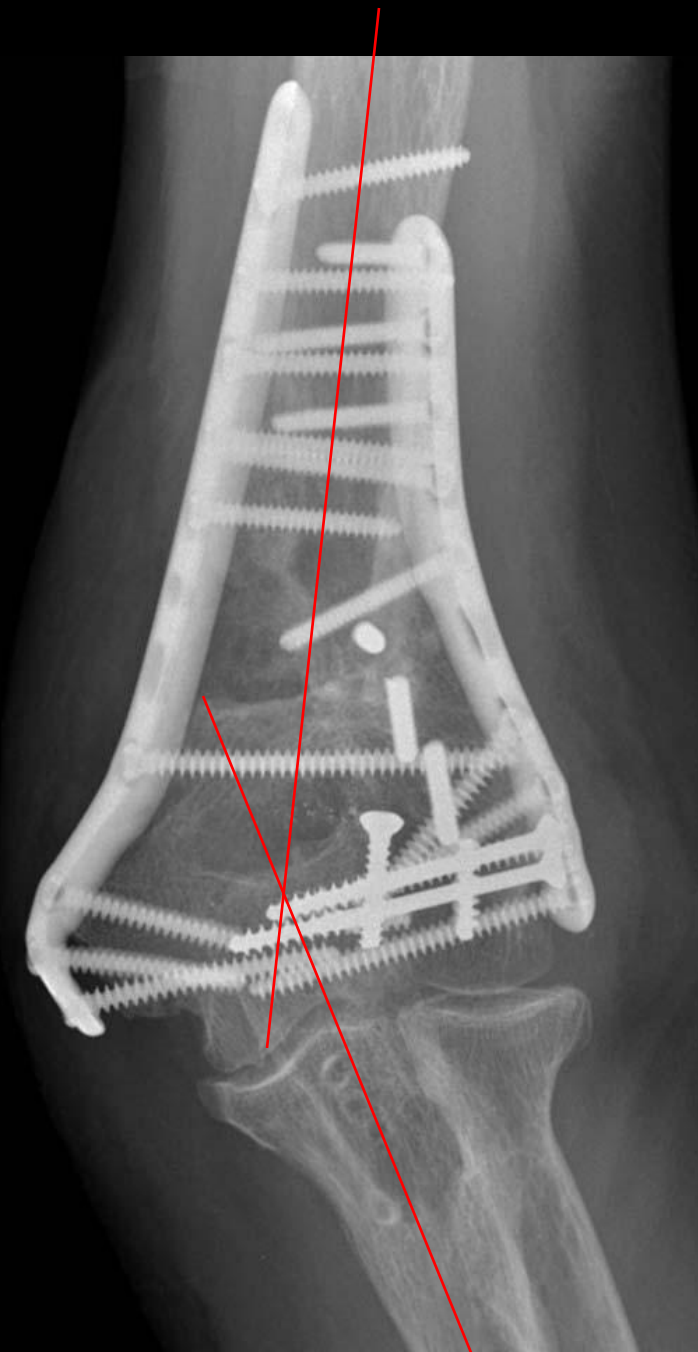


Reduction

- How to avoid extension malreduction ?







49 y/o male, postop

11/10/2011 10:00 AM

11/10/2011 10:00 AM
001 2011 11 10



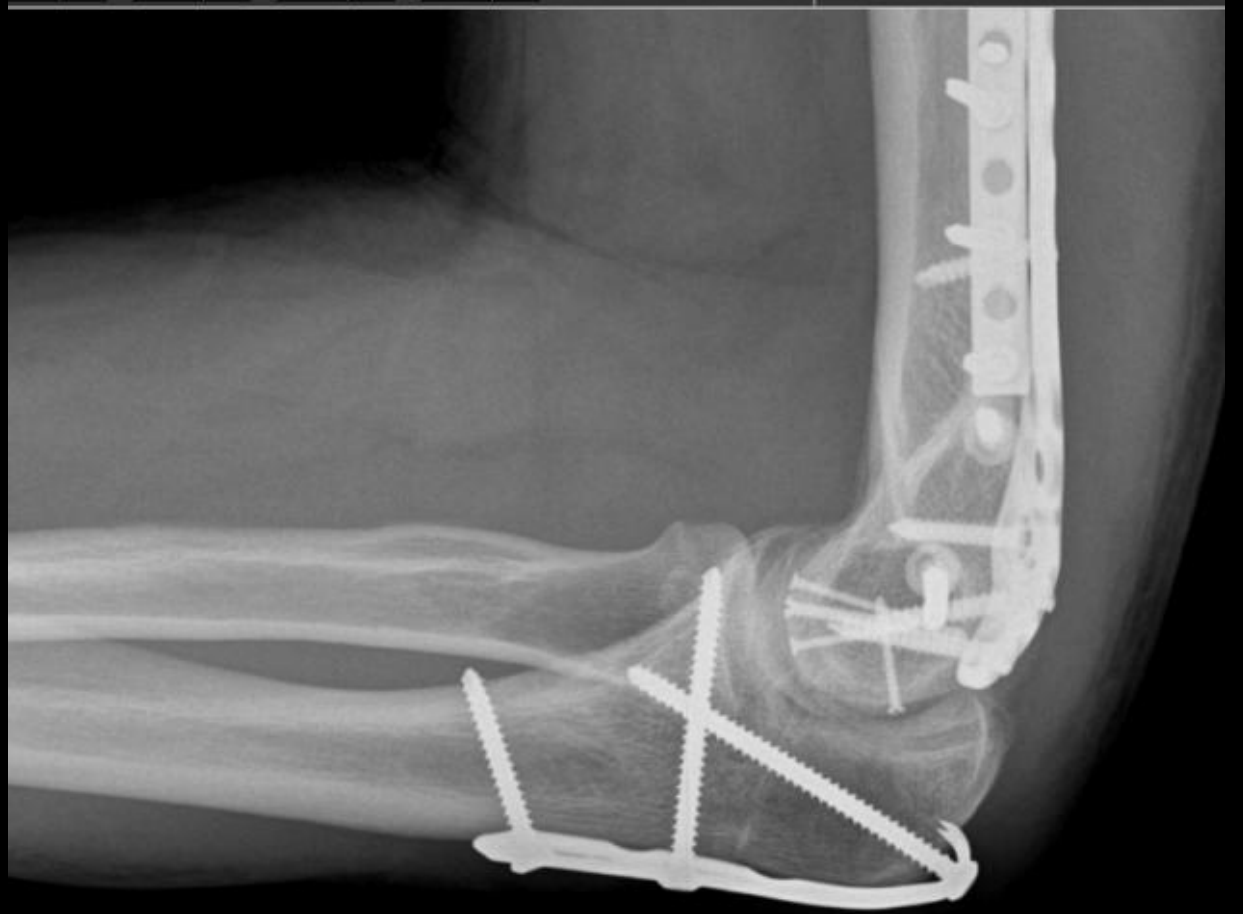
100%

NO VIEW: 45

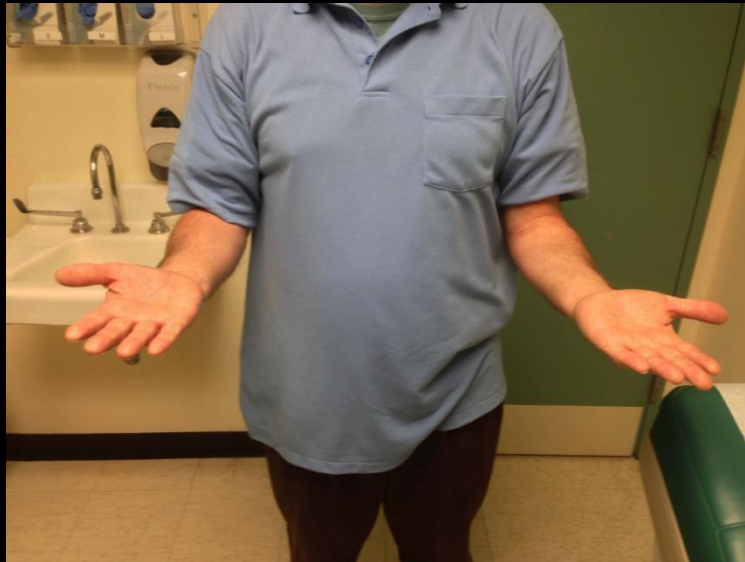
Rotation: 7.3 deg



49 y/o, 1 yr f/u

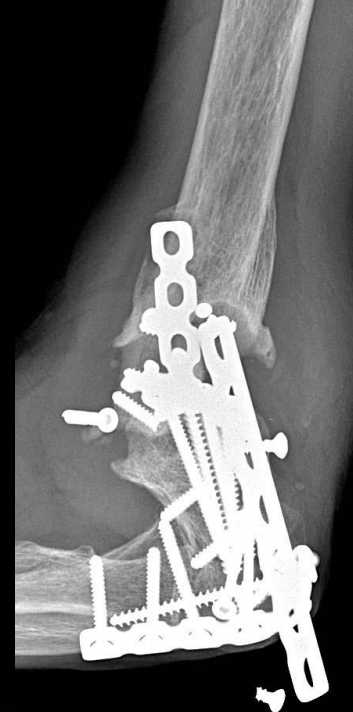
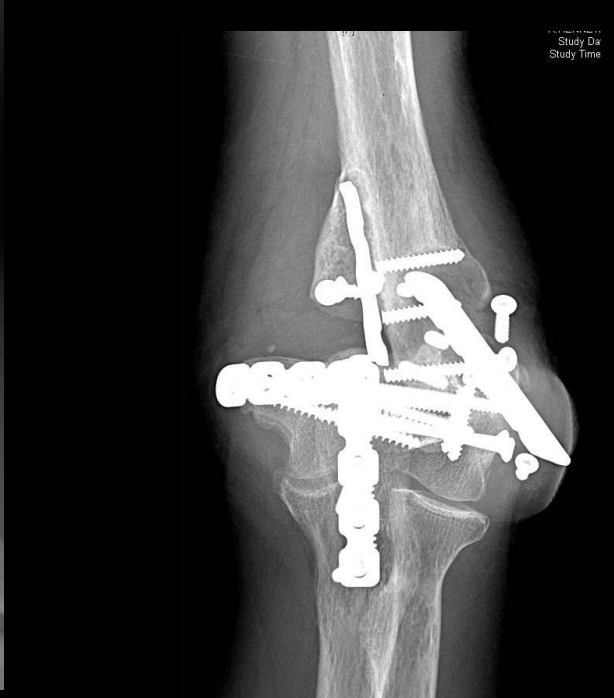


49 y/o, 1 yr f/u



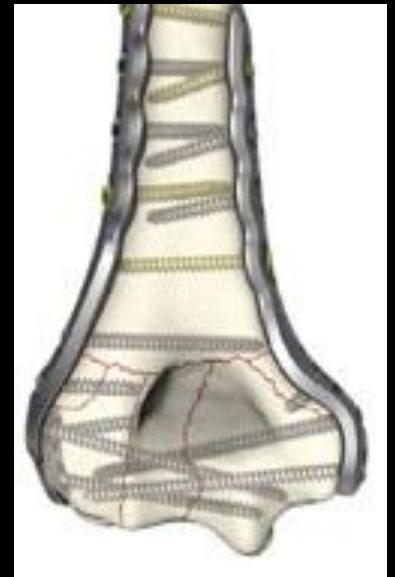
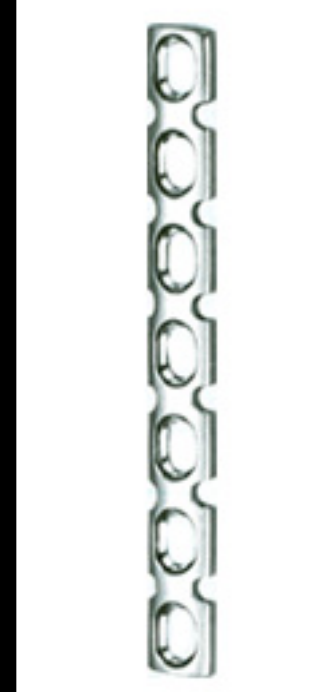
Fixation





Study Dr
Study Time

Type of implants



23 y/o, s/p snowboarding injury, ulnar nerve
3/5, hypoesthesia



20



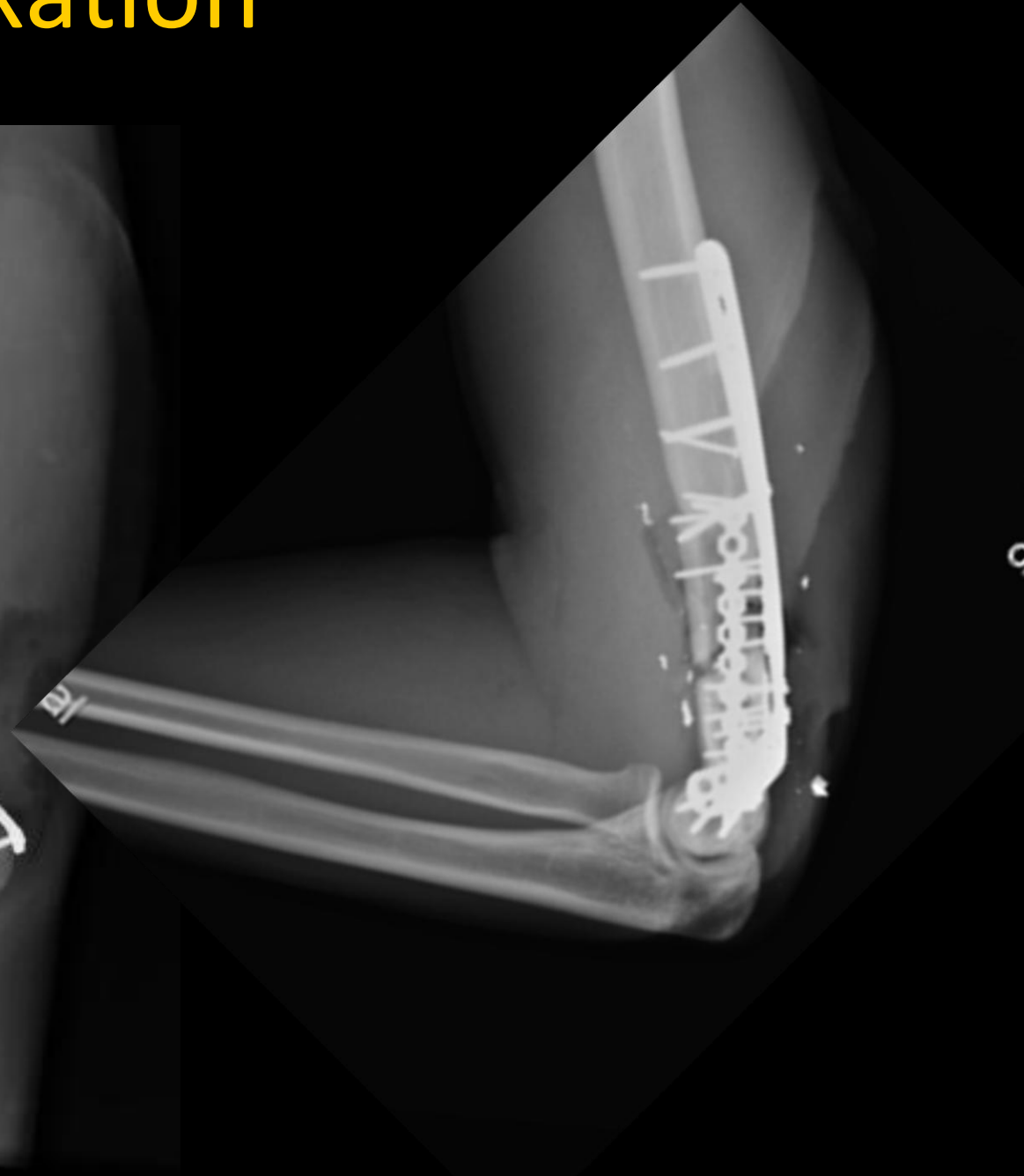
FULL FLEX



FULL EXTI



Fixation



Treatment options

- Nonoperative
- “Bag of bones”
- ORIF
- TEA



Treatment options

- ORIF

- ORIF

- ORIF

- TEA

- Nonoperative

- “Bag of bones”



94 y/o, s/p fall



94 y/o, s/p fall



THANK YOU



Utku.Kandemir@ucsf.edu



THANK YOU



Utku.Kandemir@ucsf.edu

