

# Radial Head Fractures

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# Objectives

- **Evaluation**
- **Fix or Replace?**



# Evaluation

- **Examine entire extremity**
- **Associated Injuries are common: 30%**
- **Stability: Difficult to assess unless asleep**
- **Evaluate for mechanical block to rotation**
- **Ensure adequate radiographs**





# What Additional Studies Do You Want? (Check all that apply)

- CT scan
- Radiocapitellar view
- Wrist Xray
- Nothing



# Radiocapitellar View



***Position for lateral view but angle tube 45 degrees towards the shoulder***

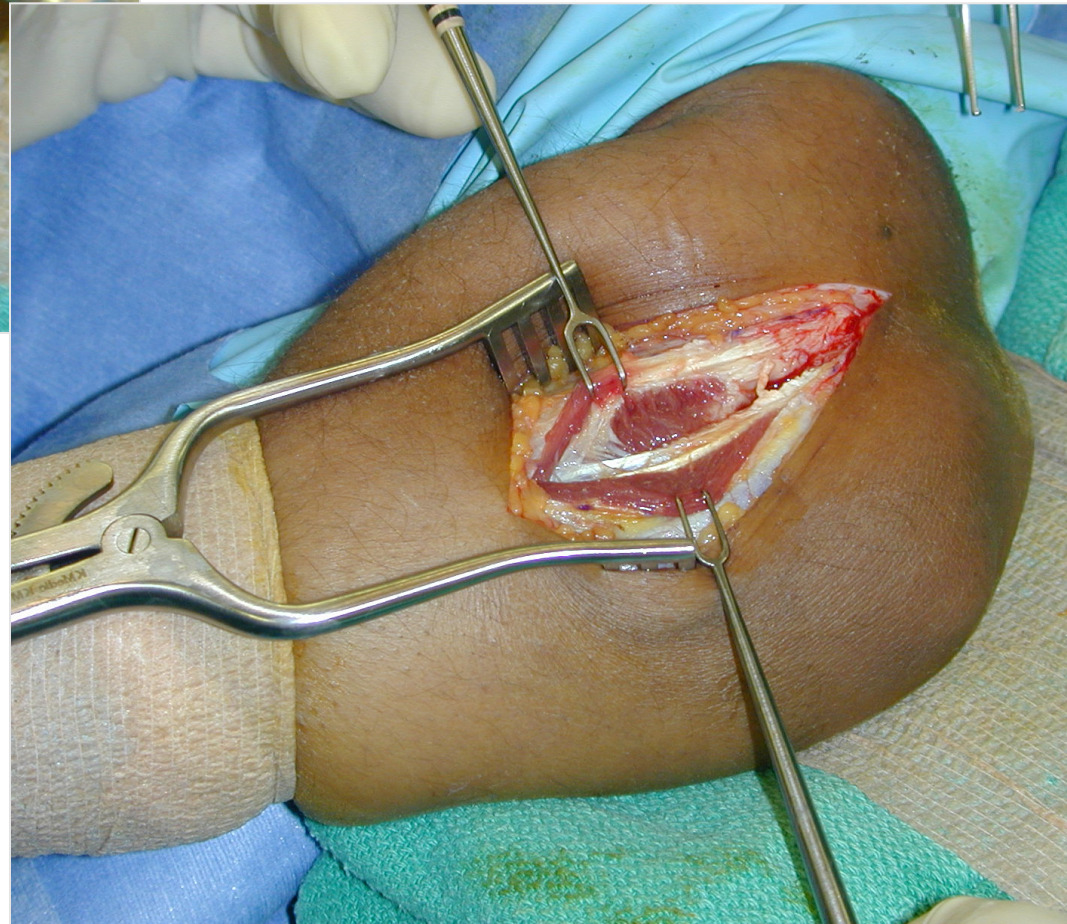
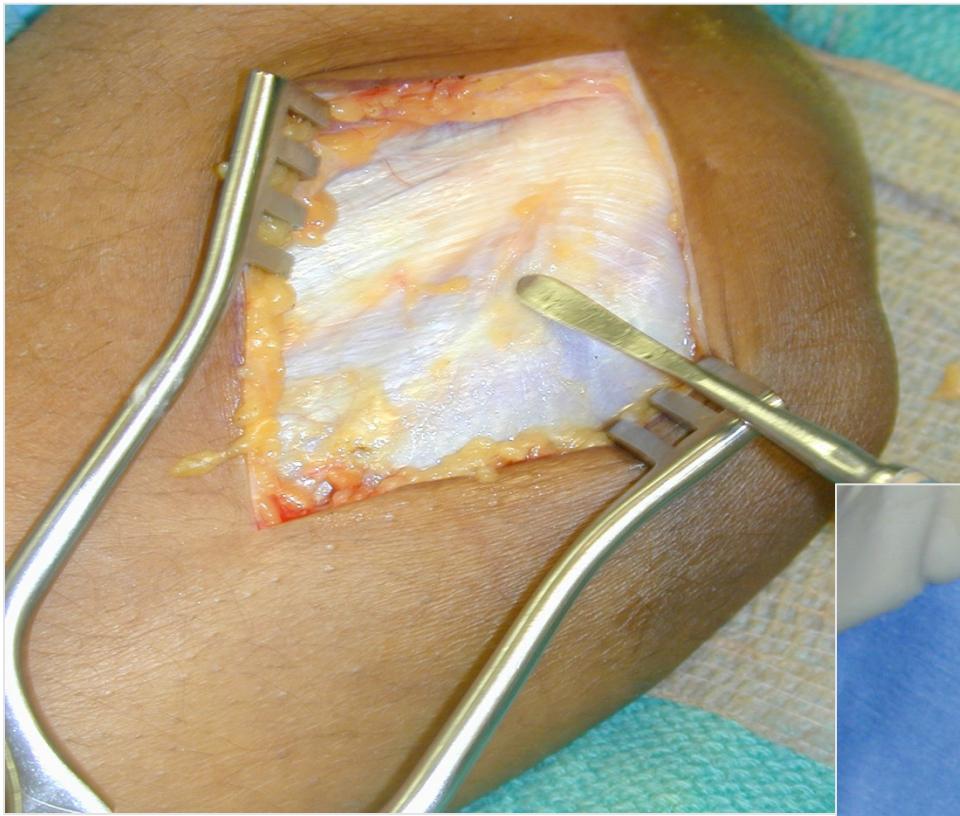


# How Do You Want to Treat?

- **Hinged Elbow Brace**
- **ORIF**
- **Excise**
- **Replace**



# Surgical Technique

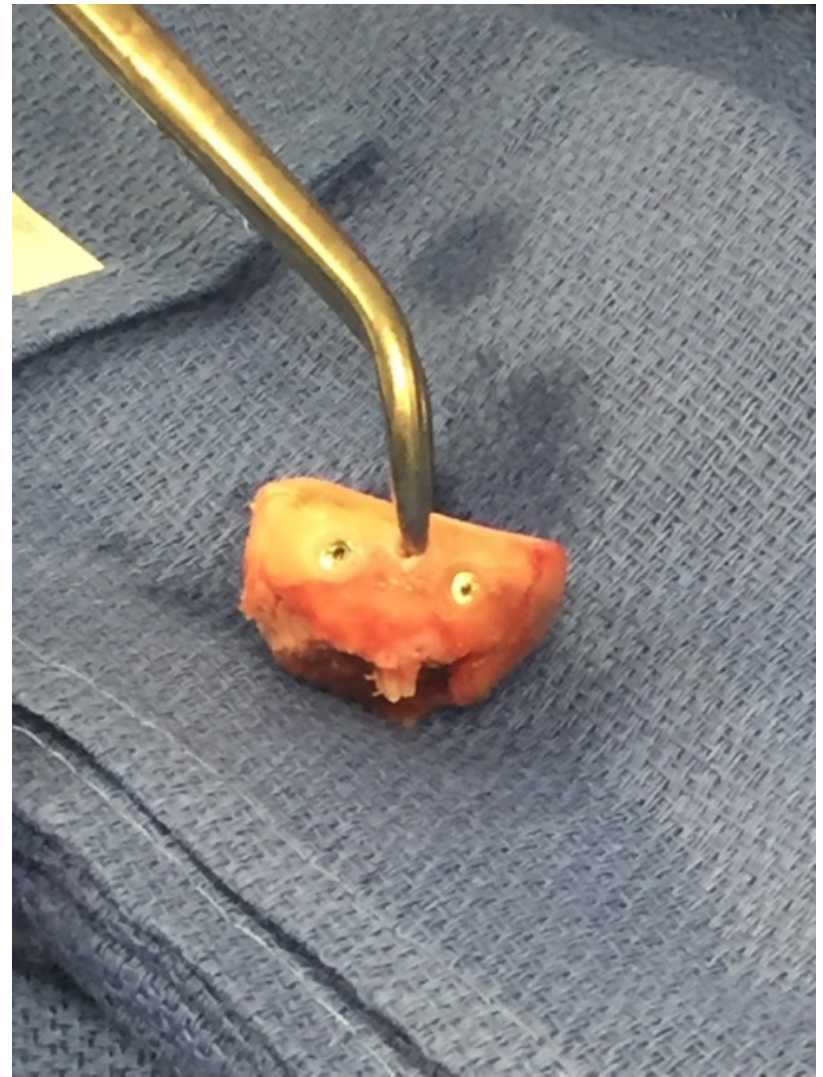




# Operative treatment

- **Tips:**
  - Kirschner wires to hold reduction
  - Use small screws
- **Order:**
  - Reconstruct Head
  - Secure radial head to neck
- **Place Hardware**





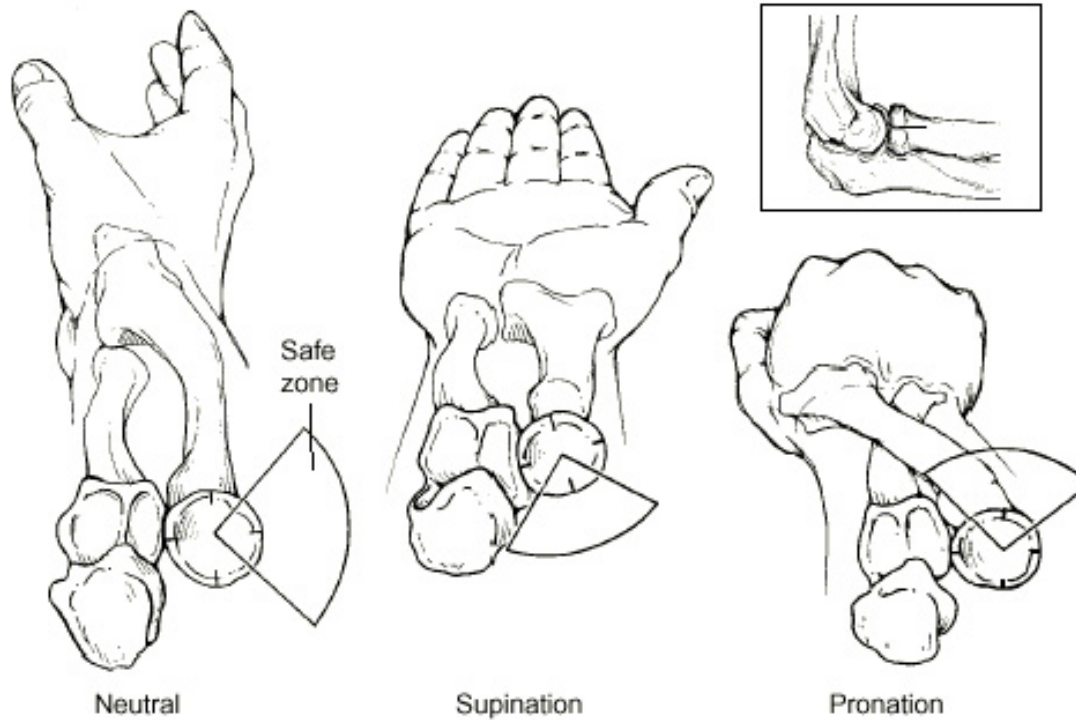


# Where Do You Want to Place Plate?

- Posterolateral in neutral position
- Posterolateral in full supination
- Posterolateral in full pronation

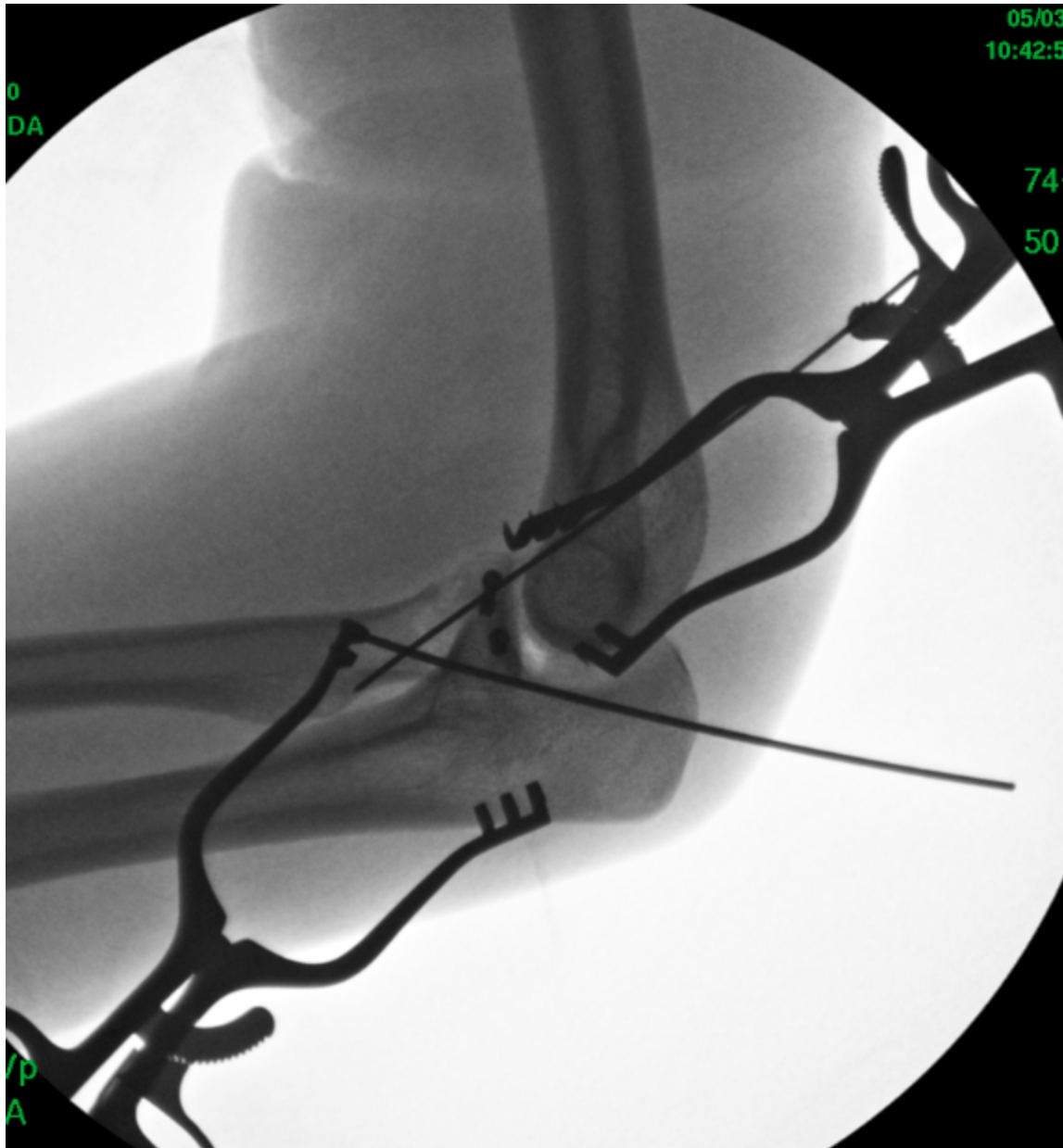


# Safe Zone

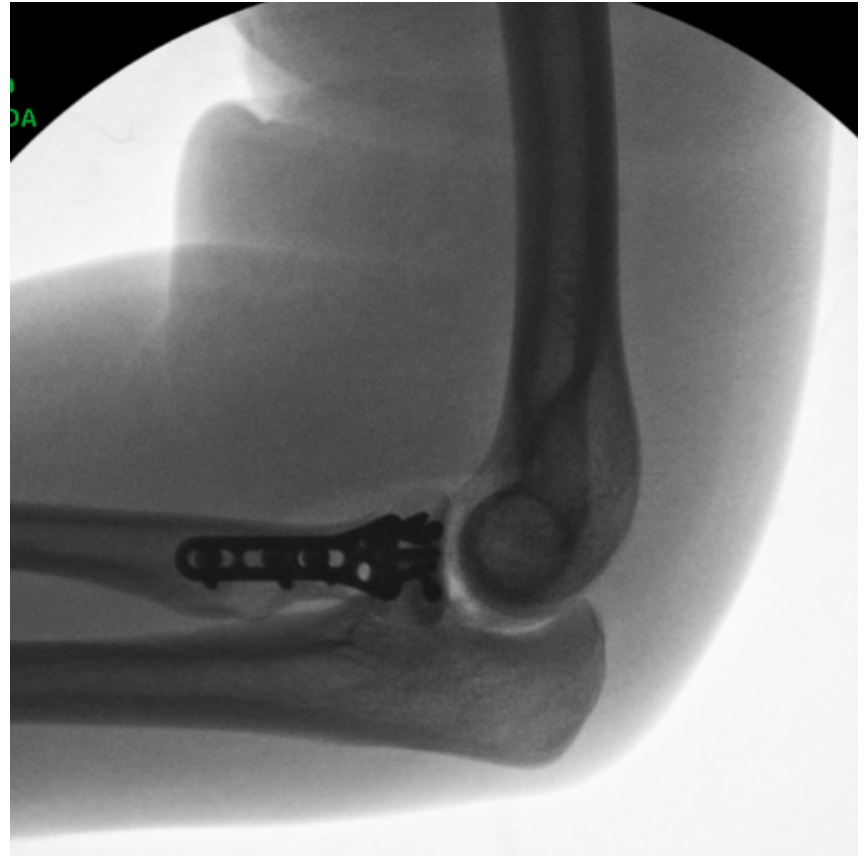


**Hotchkiss RN.**  
***J Am Acad Orthop Surg. 1997 Jan;5(1):1-10.***









***X-ray tip: partially close for final fluoro shots***





# Post op-ORIF

- Early ROM
- PT prescription on D/C
- Dynamic Splint if slow to progress
- Edema Glove



# Summary

- **Thorough evaluation so as not to miss associated injuries**
- **Surgical options: rarely excise**
- **Proper technique**
  - **Plate placement**
- **If 3 or more pieces, replace**
- **Post op regimen crucial for success**



# Tips for Replacement

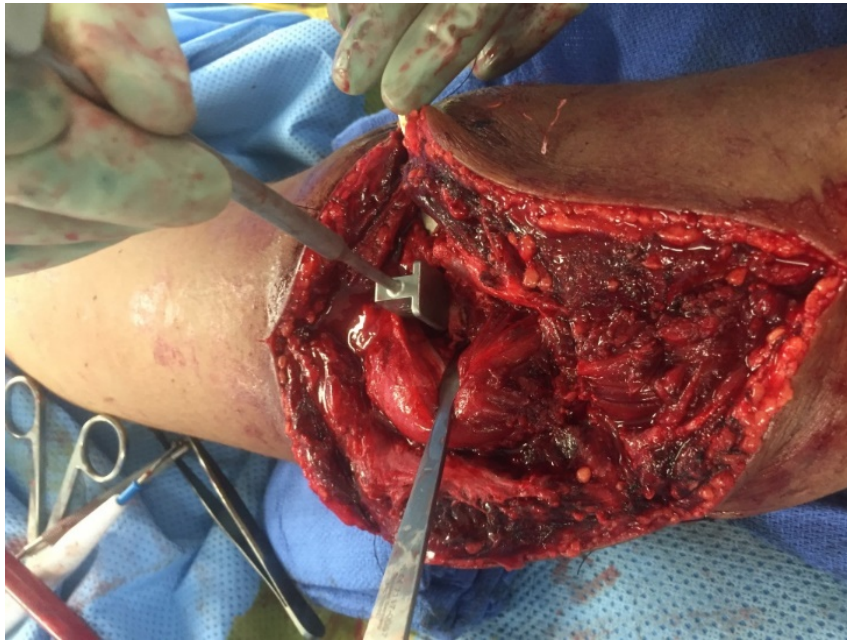


# Remember the Basics!

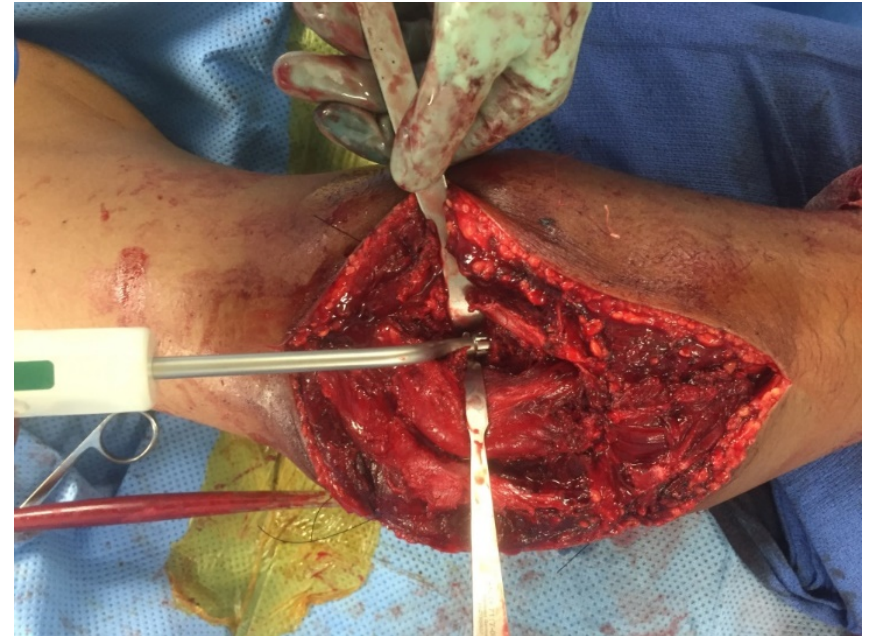


***Tip: Reassemble to be sure  
no fragments in joint!***

- **Sizing: Radial head**
- **Never Overstuff!!!**



- **Broach and then ream until gentle resistance and chatter**





- **Trial**
- **If difficult to insert, downsize or can free up more anterior capsule**
- **Check ROM**
  - **Flex/Ext**
  - **Pron/Sup**
- **Implant**

# Closely Evaluate



- **Radiographs:**

- **AP: proximal edge should not lie more than 1 mm proximal to lateral edge coronoid**
- **Coronoid and trochlea congruent**
- **Articulate 2mm distal to tip of coronoid at PRUJ**





**Thank You!**

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