

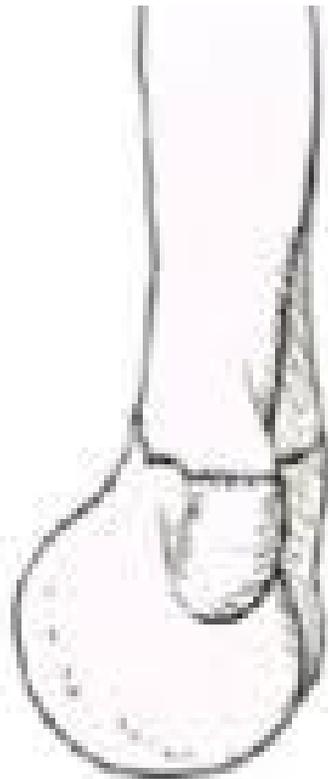
# Dr. Sameer Desai

**Paediatric Orthopaedic Surgeon**

KEM, Sahyadri Hospital, Ruby Hall,  
Jehangir Hospital

**Baramati**-Last Saturday of every month

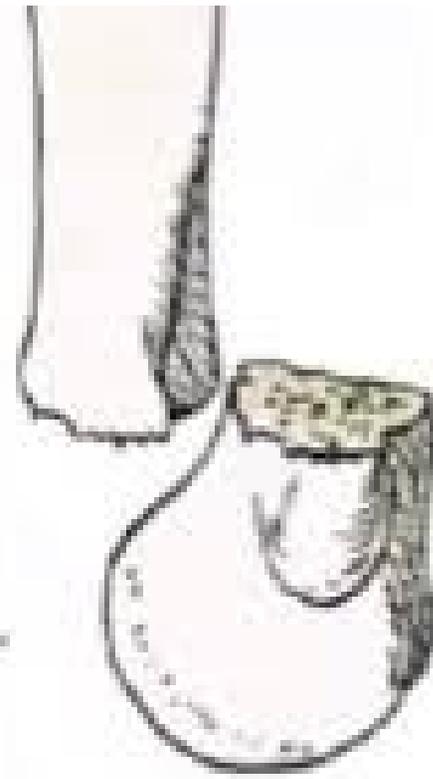
# Gartland's classification



Type I



Type II



Type III

# Management of Type1 and stable Type2

Closed reduction



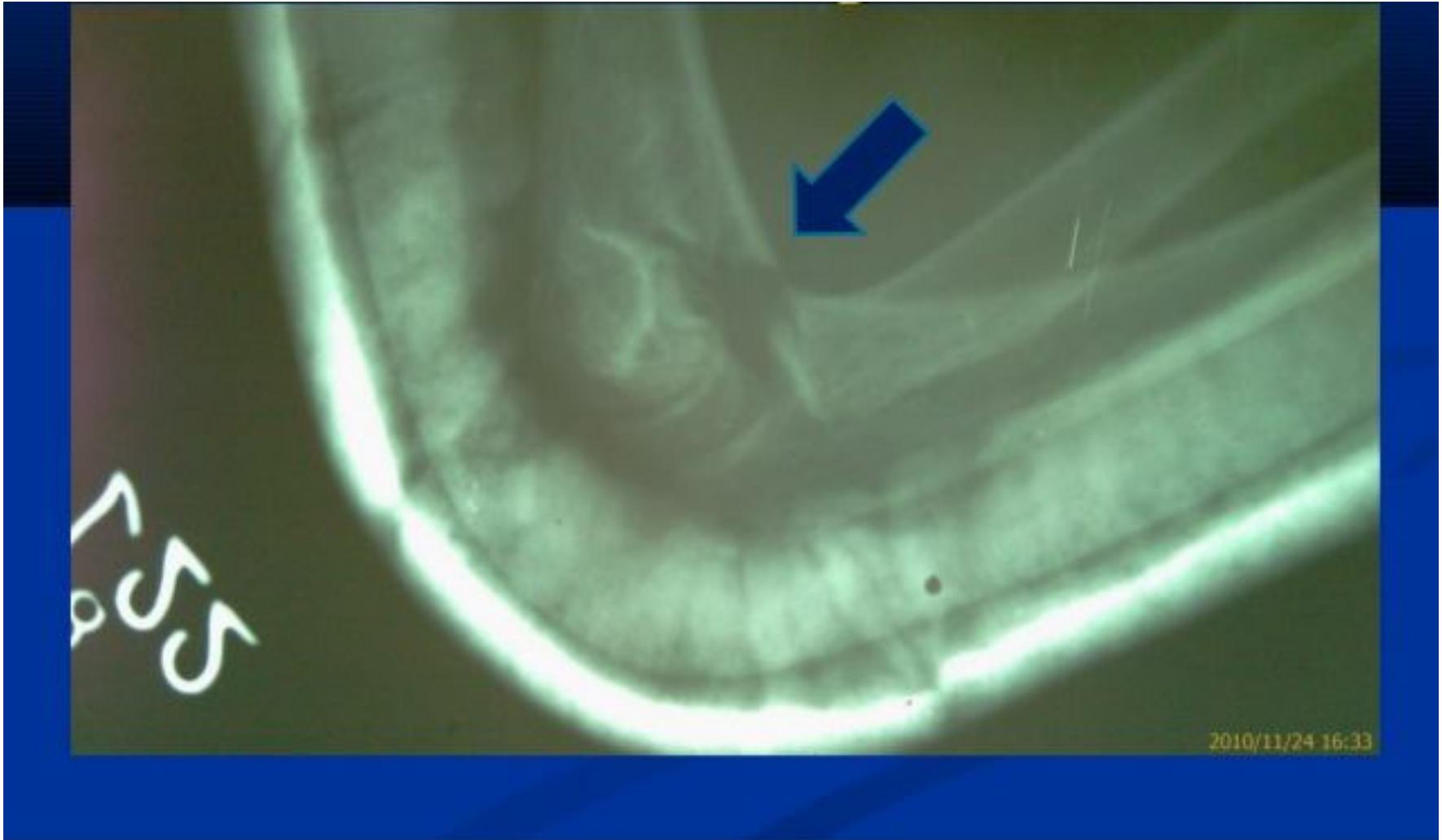
# Check stability in Rotation



# Slab and strapping



# Fish Tail Sign



Crescent Sign



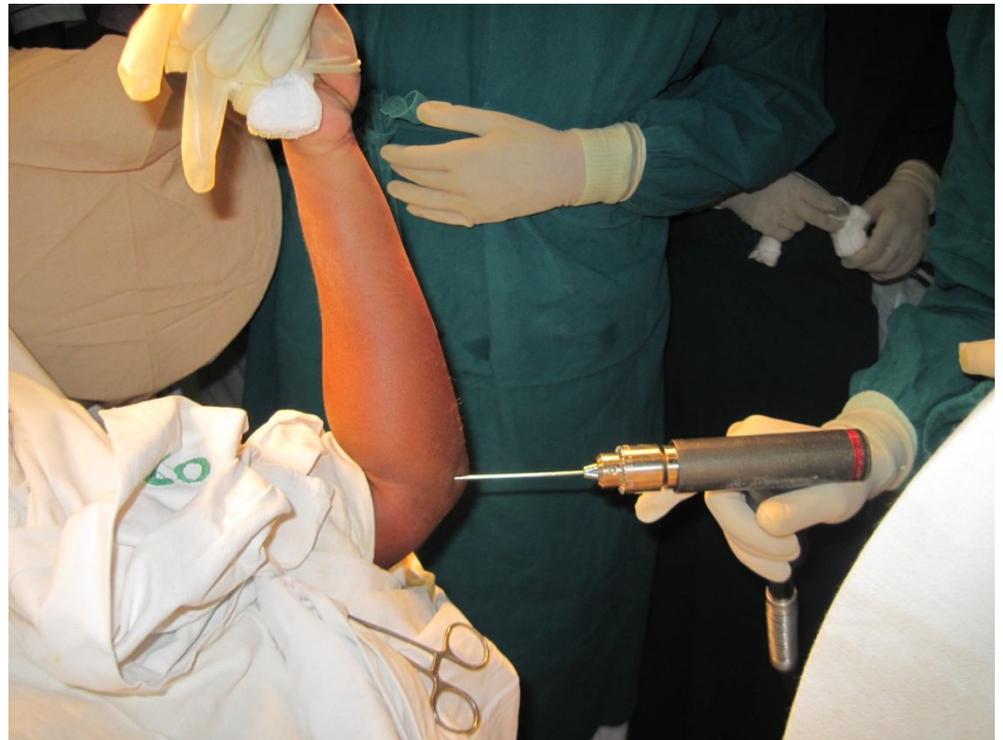
# Unstable fractures- How I fix it



# K wire fixation

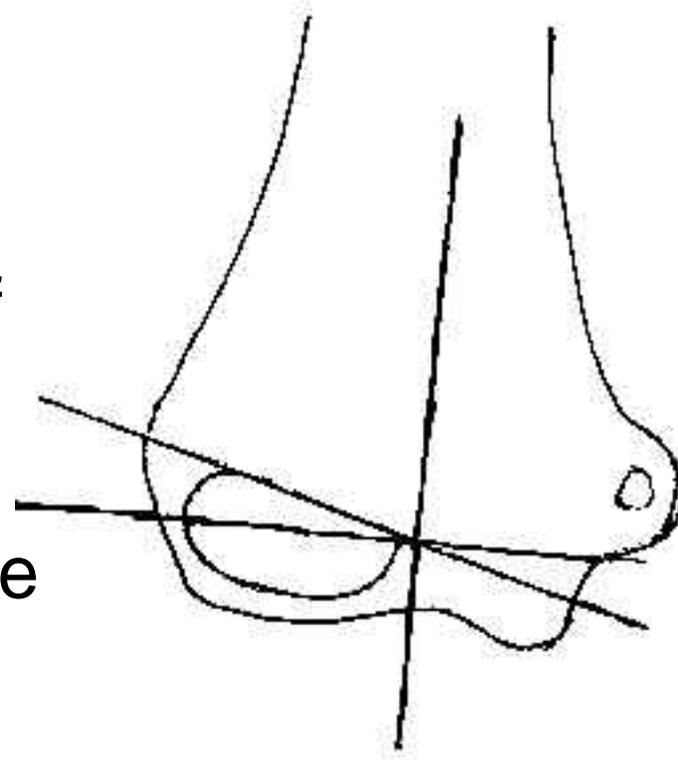


Insert all K wires in lateral view

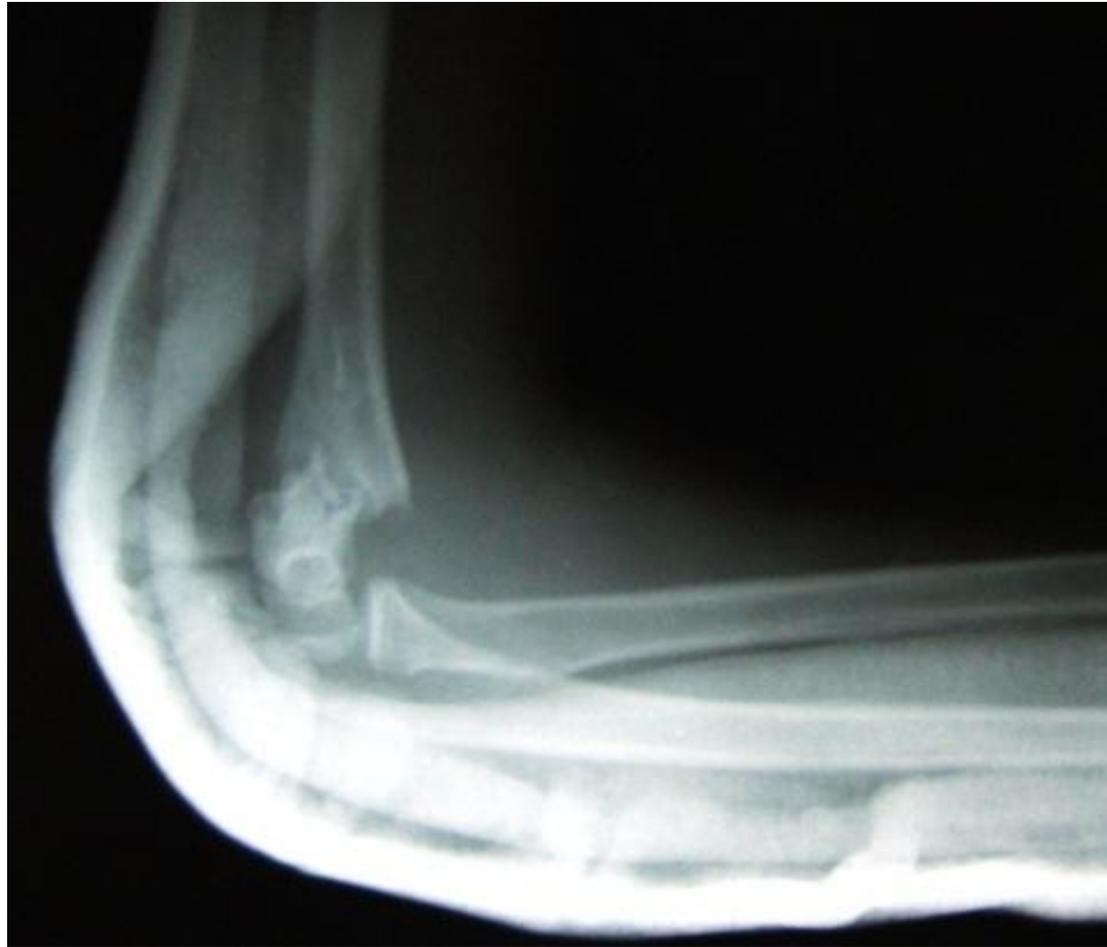


# Baumans Angle

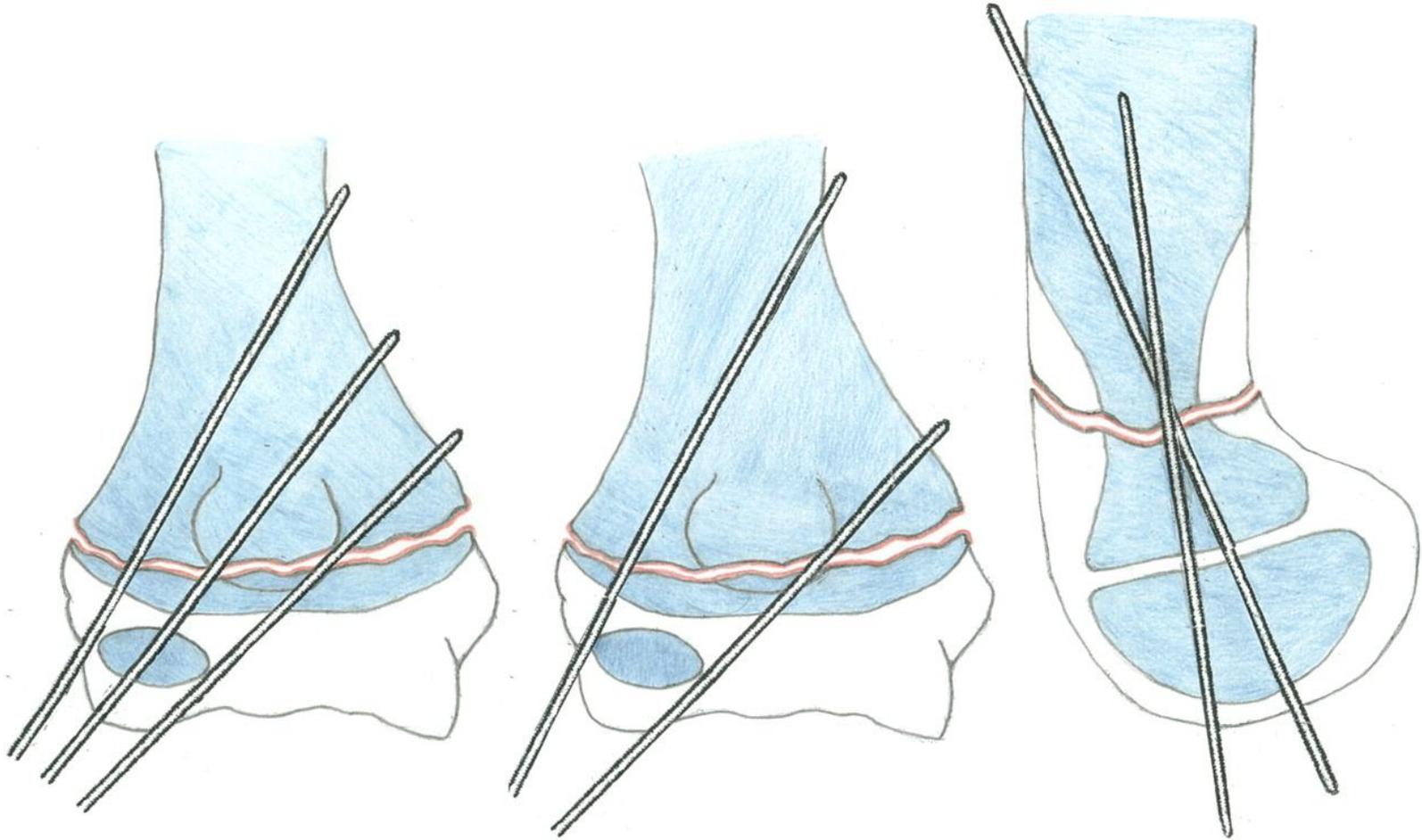
- Compare with normal side
- A 10 degree change of Bauman angle is equivalent to 5 degree change in carrying angle



# Fish Tail Sign and Crescent Sign



# Pin Configuration



# Pin configuration

Starting point  
Within cartilagenous anlage

Starting point  
Extra articular



# Wire through olecranon fossa- 4 point fixation



# Tips for irreducible fracture

Joystick method



# Anterior Joystick- Dr. Viraj Shingade

Anterior entry point

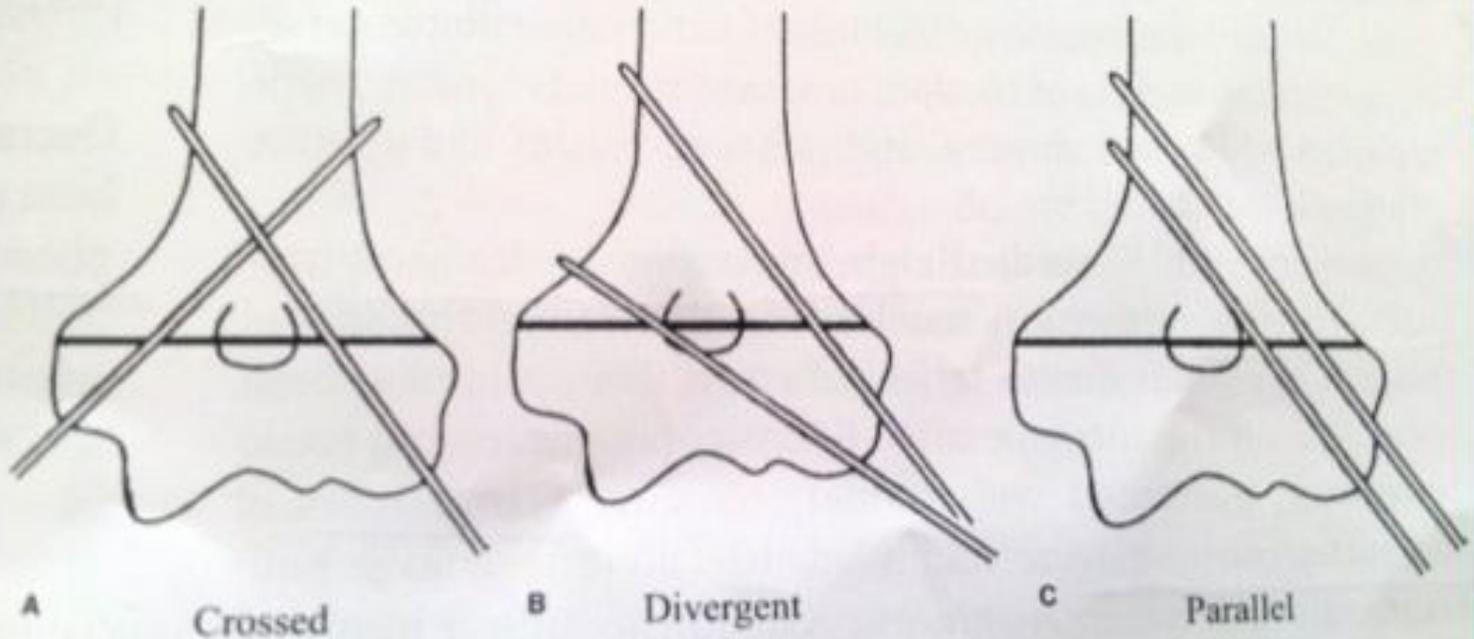


Suction canulla

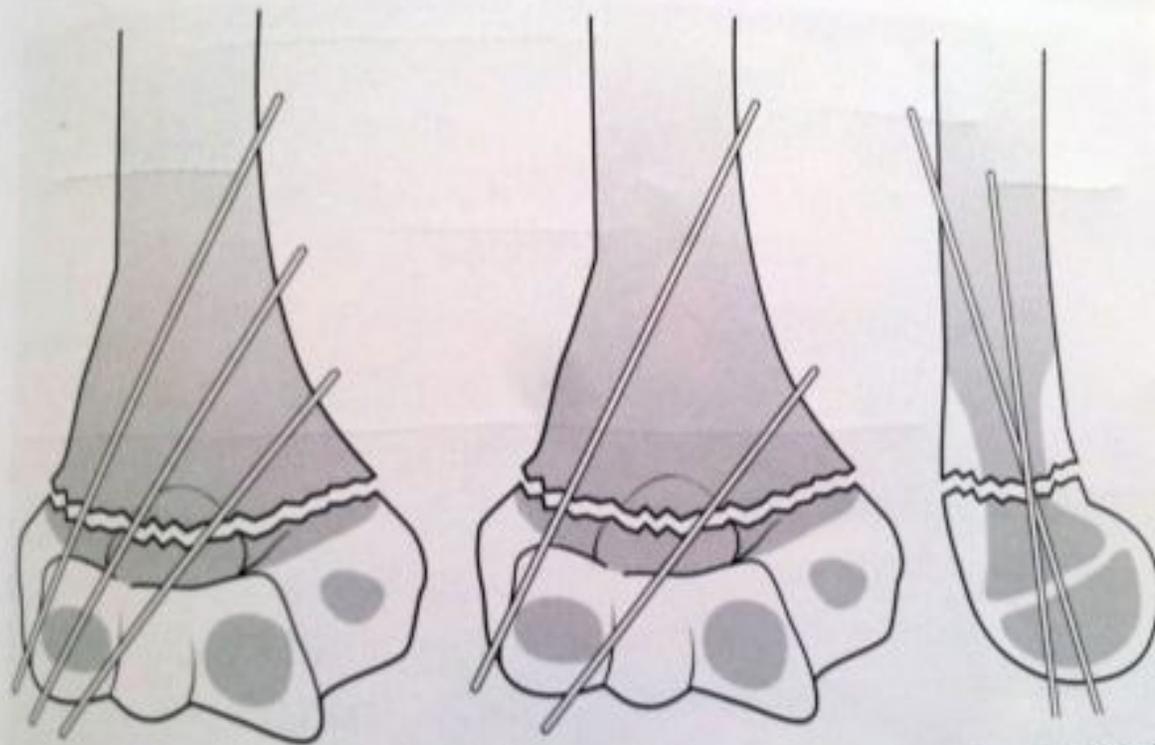


used pins  
al.<sup>80</sup> re-  
patients

tion has been advocated. In a study of 21 children with type  
III fractures, two lateral-entry pins were inserted after reduction  
and stability was assessed by comparing lateral fluoroscopic



if compartment syndrome is suspected, urgent reduction and



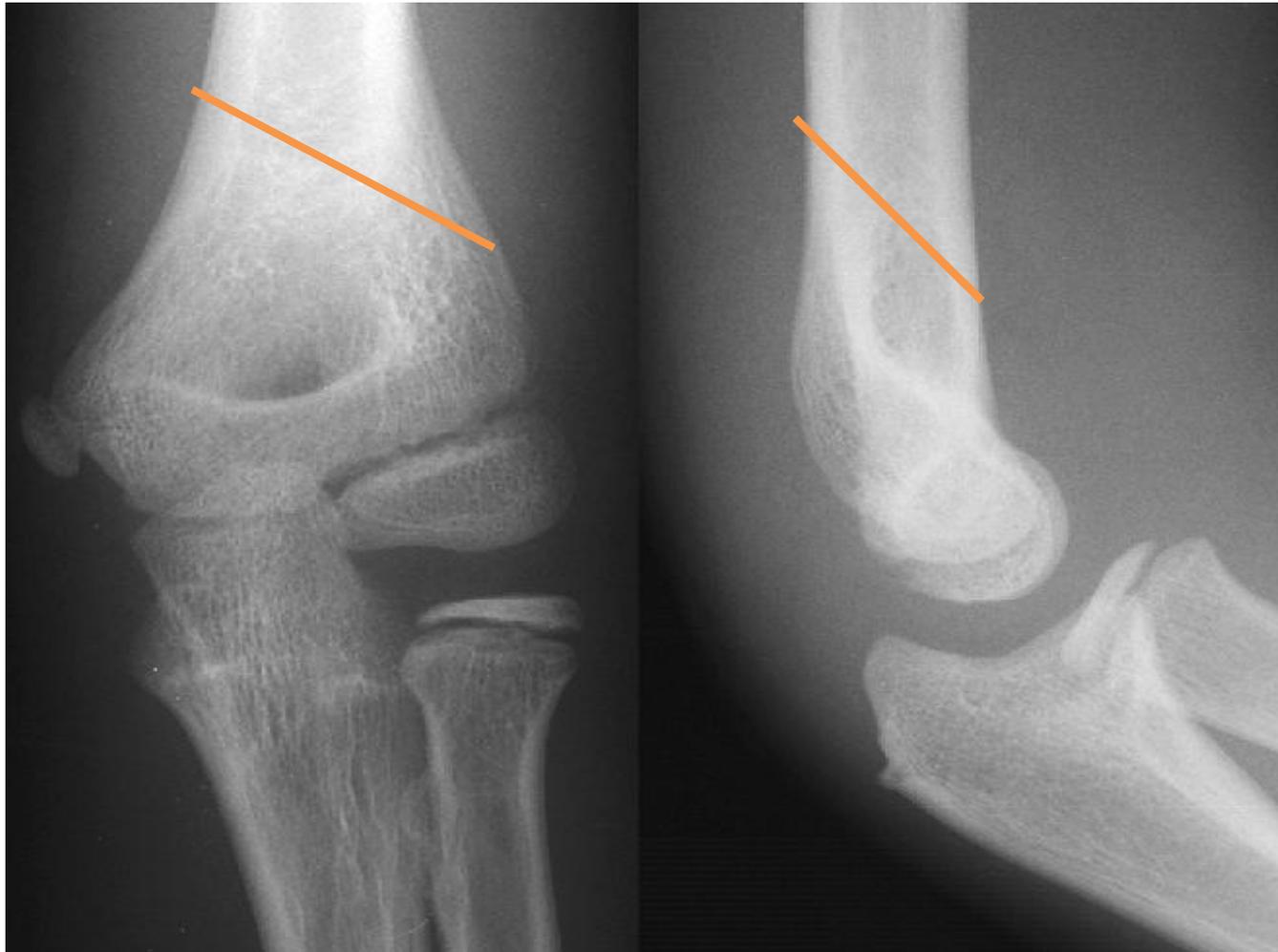
**FIGURE 14-22** Properly placed divergent lateral entry pins. On the AP view, there should be maximal pin separation at the fracture site, the pins should engage both medial and lateral columns just proximal to the

**FIG**  
the

# Unstable Fractures

Oblique Fracture

High sagittal fracture



# Supracondylar fracture

Flexion



## **Technique of close reduction and percutaneous pinning**

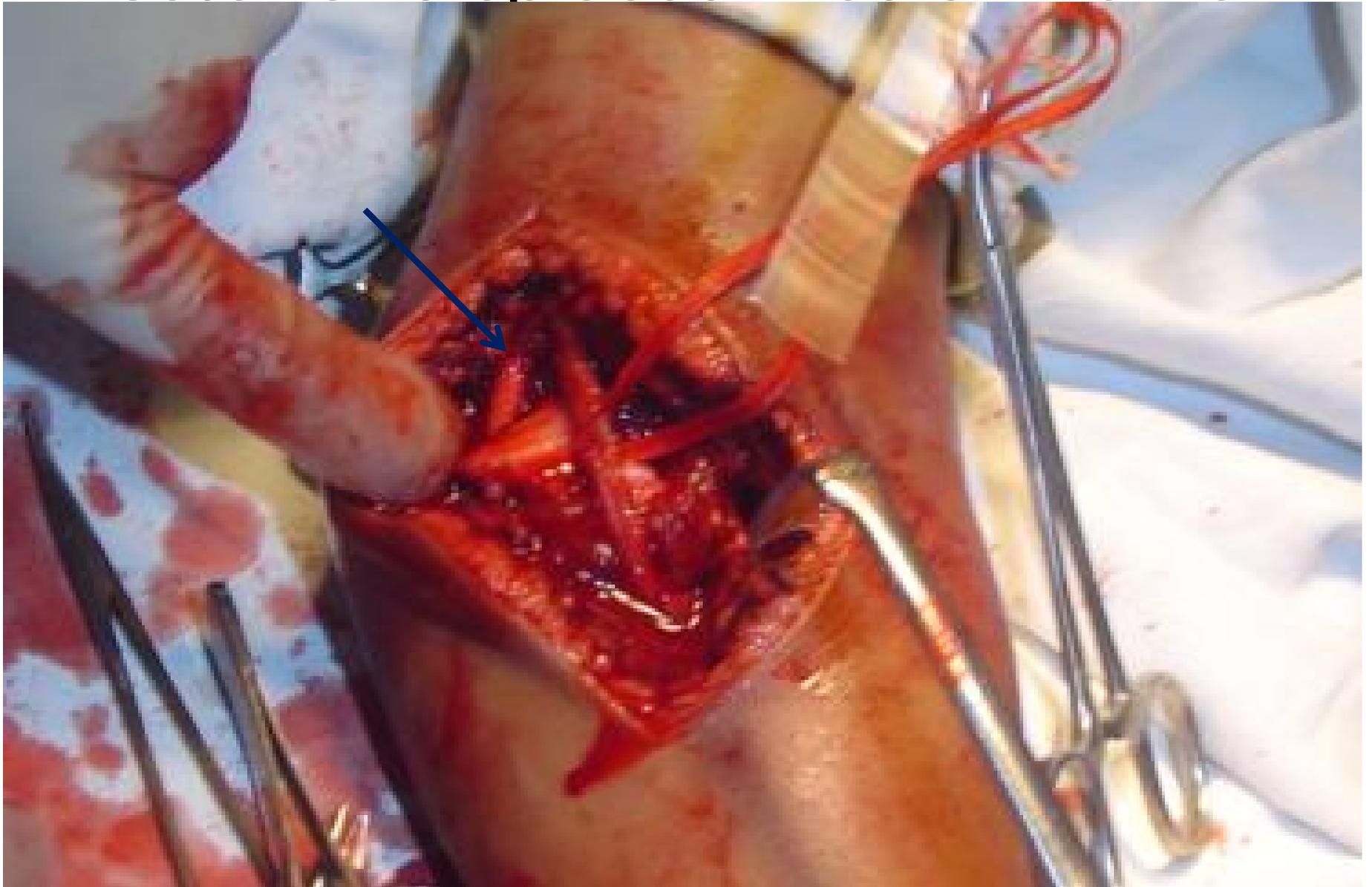


- Pinning is generally required for unstable type II and III flexion supracondylar fractures.
- Pinning should be performed after closed reduction with the elbow in mild flexion (usually at 30 degrees ) or full extension, holding the elbow in reduced position

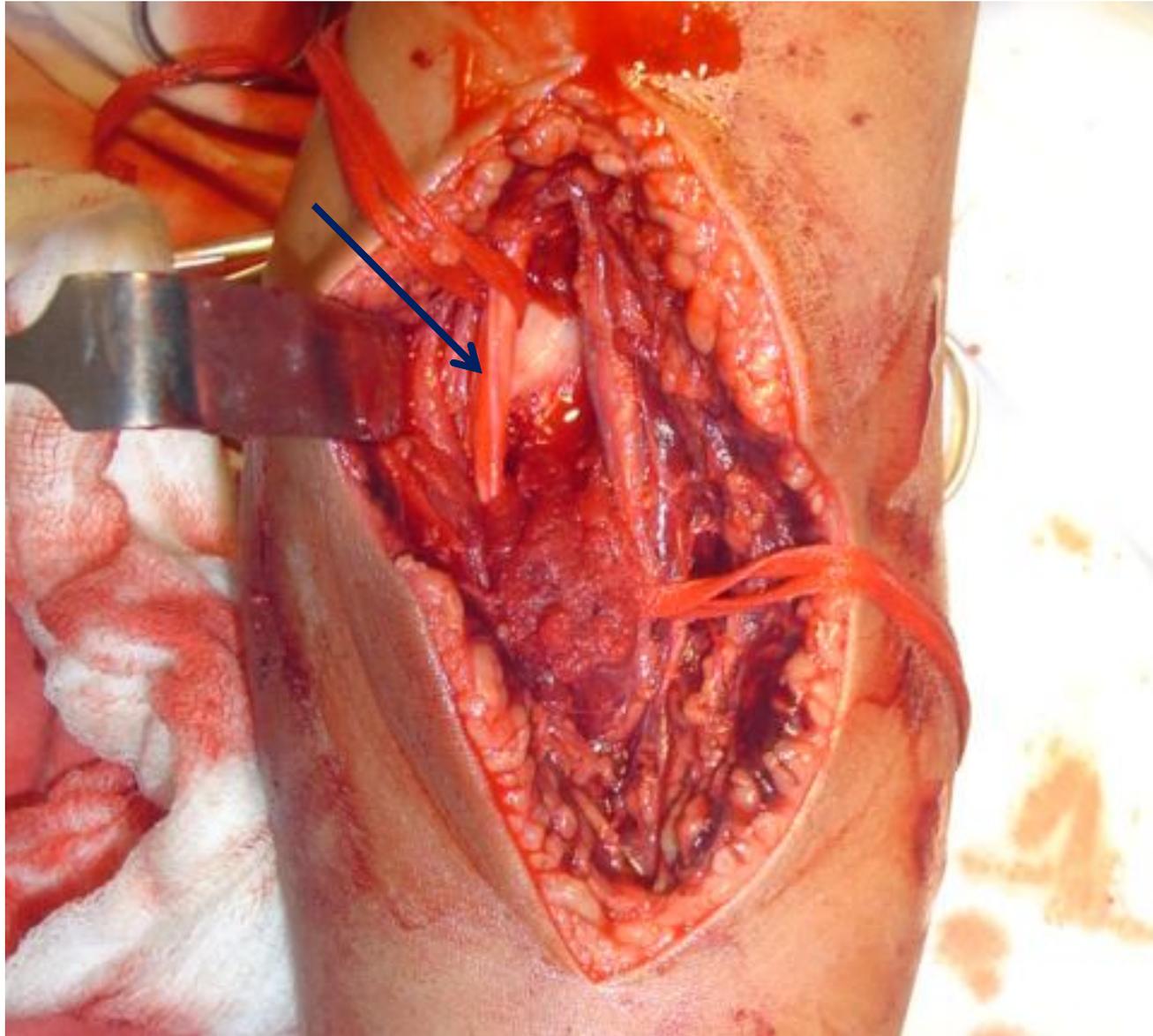
# Pink Pulseless hand with median nerve injury



# Posterior displaced median nerve



# Medain nerve after release



# Conclusion of our study

- Type 3 supracondylar fractures without neurovascular injury- closed reduction and 3 lateral k wires
- Type 3 supracondylar fractures with brachial artery injury- open reduction with exploration of median nerve and brachial artery and 2 lateral and 1 medial K wire insertion
- Pre operative accurate assessment of nerve injury may be difficult because of pain and lack of co operation
- 4 cases had posterior displacement of median nerve. A closed reduction would have caused median nerve palsy
- A higher incidence of median nerve palsy in most of the series could be because of median nerve being entrapped during reduction maneuver

# Conclusion

- Availability of vascular surgeons has made it easier for exploration of nerve and vessels and their repair
- It is best left to the discretion of the surgeon whether to closely observe the child for 48 hrs after closed reduction of a pink pulseless hand
- Or to sleep peacefully after you have done a vascular repair and removed the entrapment of the median nerve

**Thank you**