



# SUPRACONDYLAR FRACTURES

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## MECHANISM OF INJURY

Most common paediatric elbow fracture. Usual occur with fall on out stretched hand with hyper extension of the elbow.

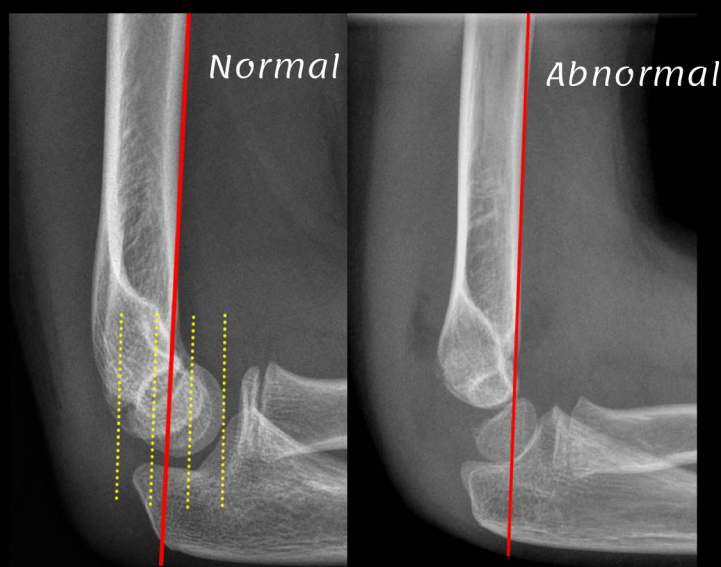
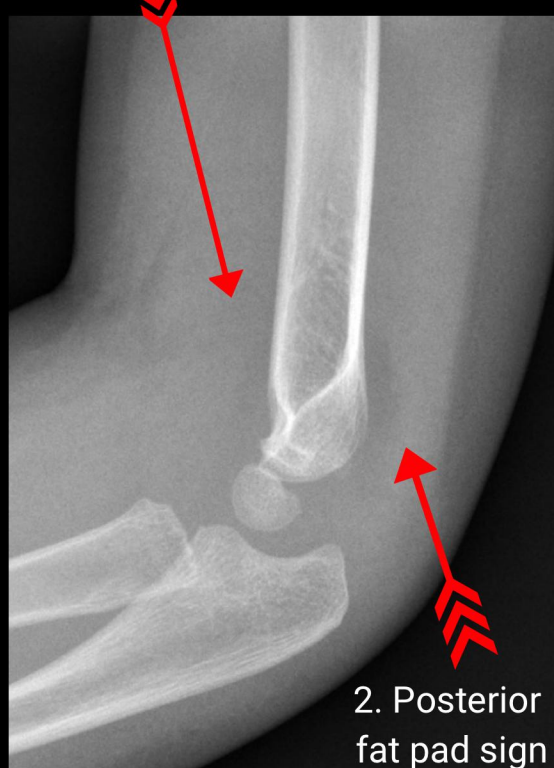
Peak incidence 5-8 years.

25% are minimally displaced or undisplaced making them tricky to spot.



## RADIOGRAPHIC FEATURES

1. **Anterior fat pad sign (sail sign):** the anterior fat pad is elevated by a joint effusion and appears as a lucent triangle on the lateral projection



3. **Anterior humeral line** should intersect the middle third of the capitellum in most children. Although, in children under 4, the anterior humeral line may pass through the anterior third without injury

## GARTLAND CLASSIFICATION



## MANAGEMENT

**Type 1:** undisplaced

Most often conservative

**Type 2:** displaced with intact posterior cortex

Open reduction and internal fixation or conservative management

**Type 3:** complete displacement

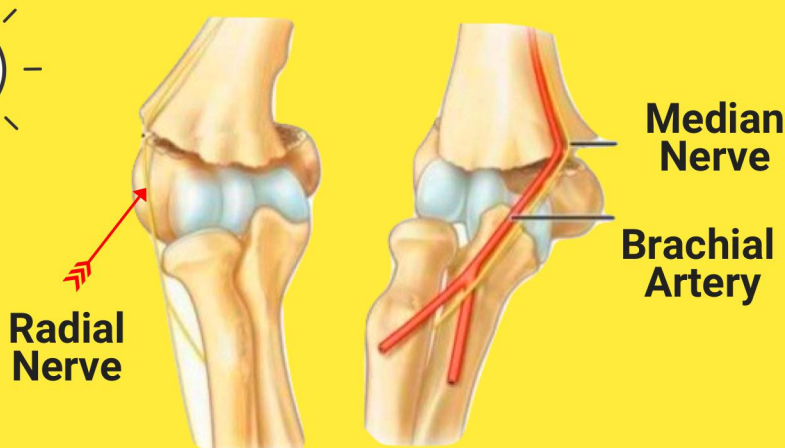
Open reduction and internal fixation



This fracture may cause neurovascular damage if there is major disruption.

Check neurovascular status

Think compartment syndrome



## References

1. Radiopaedia. [www.radiopaedia.org](http://www.radiopaedia.org) @radiopaedia
2. Accident and Emergency Radiology: A survival guide. 3e. by Nigel Raby.
3. Royal Children's Hospital Melbourne [www.rch.org.uk](http://www.rch.org.uk)

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