

MICOD - 07/05/24

Case contributor – Dr. Sonal Saran

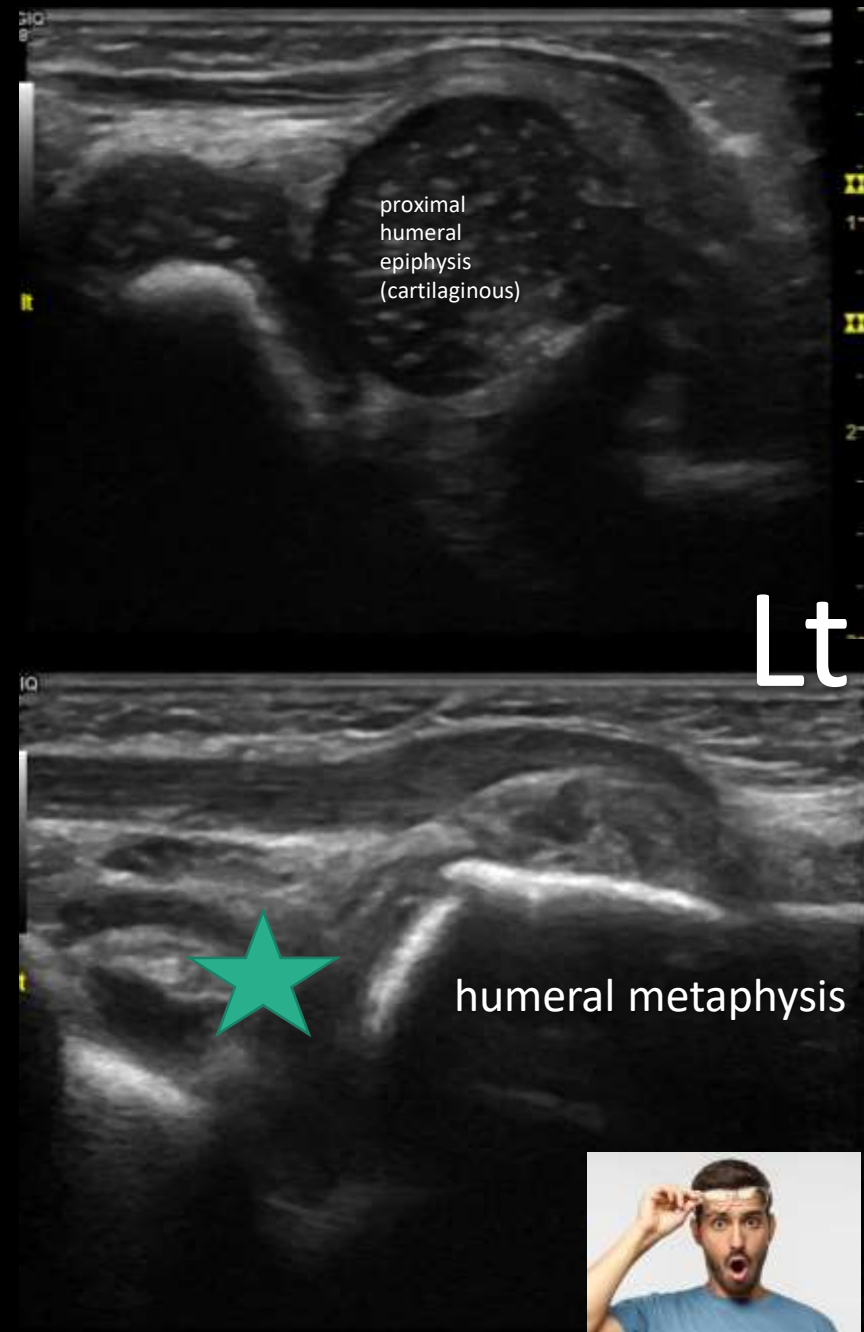
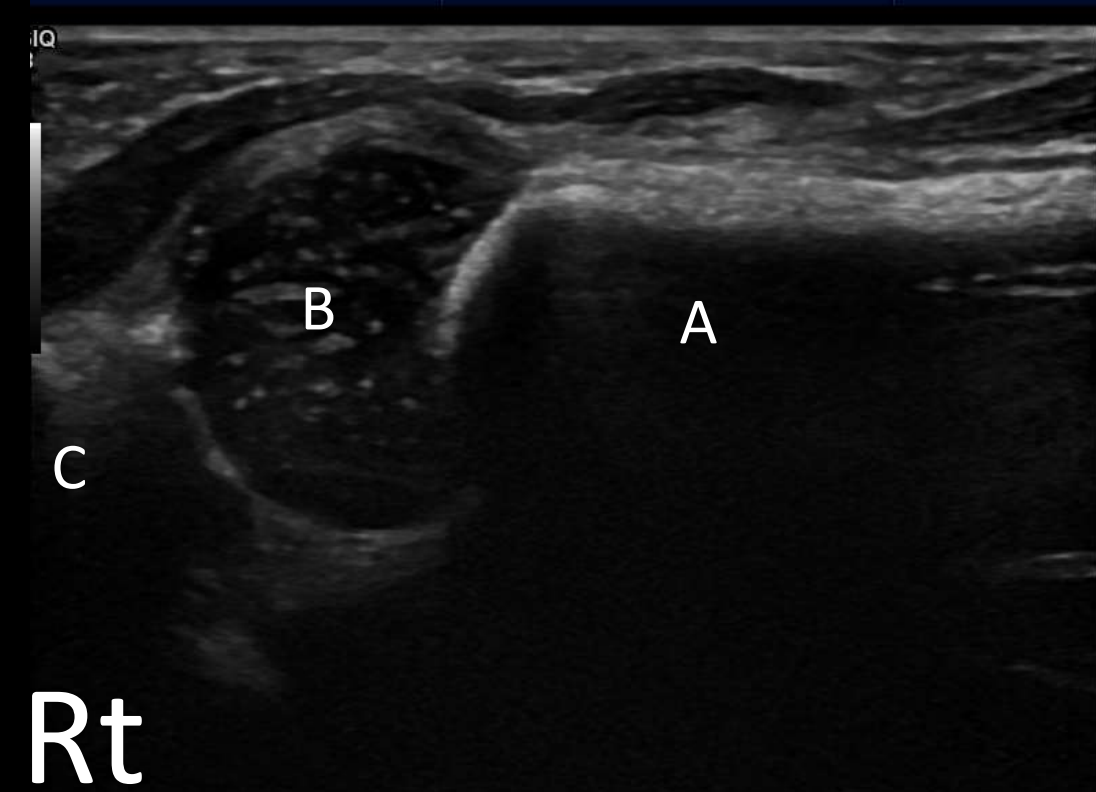
MI-COD

MSS INDIA- Case Of the Day



7 days old child, crying and not moving left arm





Rt

Lt

1. A: proximal humeral metaphysis, B: proximal humeral epiphysis (cartilaginous) and C: glenoid
2. Separation of the proximal humeral epiphysis
3. Salter-Harris Type 1.

Transphyseal separation of distal humerus in an infant diagnosed with the help of radiography and ultrasonography

Sonal Saran⁽¹⁾ and Mohit Singh⁽¹⁾

► [Author information](#) ► [Article notes](#) ► [Copyright and License information](#) ► [PMC Disclaimer](#)



Figure 1. Conventional radiograph of the child's elbow showing posteromedial dislocation of upper end of radius and ulna with respect to humerus and extensive soft tissue swelling in the lower arm and complete forearm region.

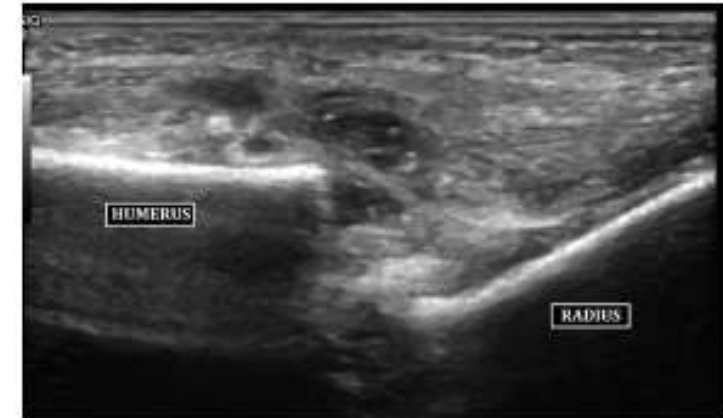


Figure 2. High frequency ultrasound examination of the affected elbow showing separation of the base of distal humeral epiphysis from the humeral metaphysis and bare surface of metaphysis without epiphyseal coverage.



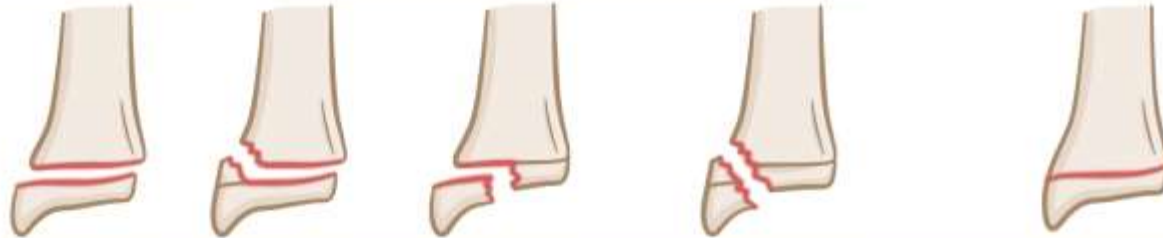
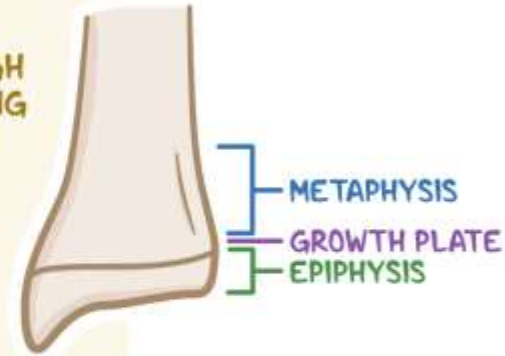
Figure 3. Ultrasound of the normal contra lateral elbow showed normal appearance and alignment of humeral epiphysis (HEp) and radial epiphysis (REp).

SYMPTOMS

- * PAIN FOLLOWED by SWELLING AROUND END of AFFECTED LONG BONE
- * AREA AROUND FRACTURE PAINFUL to TOUCH
- * UNABLE to put WEIGHT on AFFECTED LIMB
- * LIMITED RANGE of MOTION
- * BONE DEFORMITY

BACKGROUND

- * BREAK or FRACTURE THROUGH the **GROWTH PLATE** of a LONG BONE (i.e. TIBIA or HUMERUS)
- * MOST COMMON in CHILDREN
↳ esp. THOSE ASSIGNED MALE at BIRTH
- * CAN LEAD to PERMANENT GROWTH ARREST if NOT DIAGNOSED & TREATED QUICKLY



TYPE I

TYPE II

TYPE III

TYPE IV

TYPE V

SEVERITY

CAUSES

~ ROTATING or TWISTING FORCE

~ COMPRESSION or CRUSHING FORCE

~ COMPRESSION or CRUSHING FORCE
~ BONE INFECTION

TREATMENT

~ CLOSED REDUCTION

~ OPEN REDUCTION

~ DEPENDS on SEVERITY