

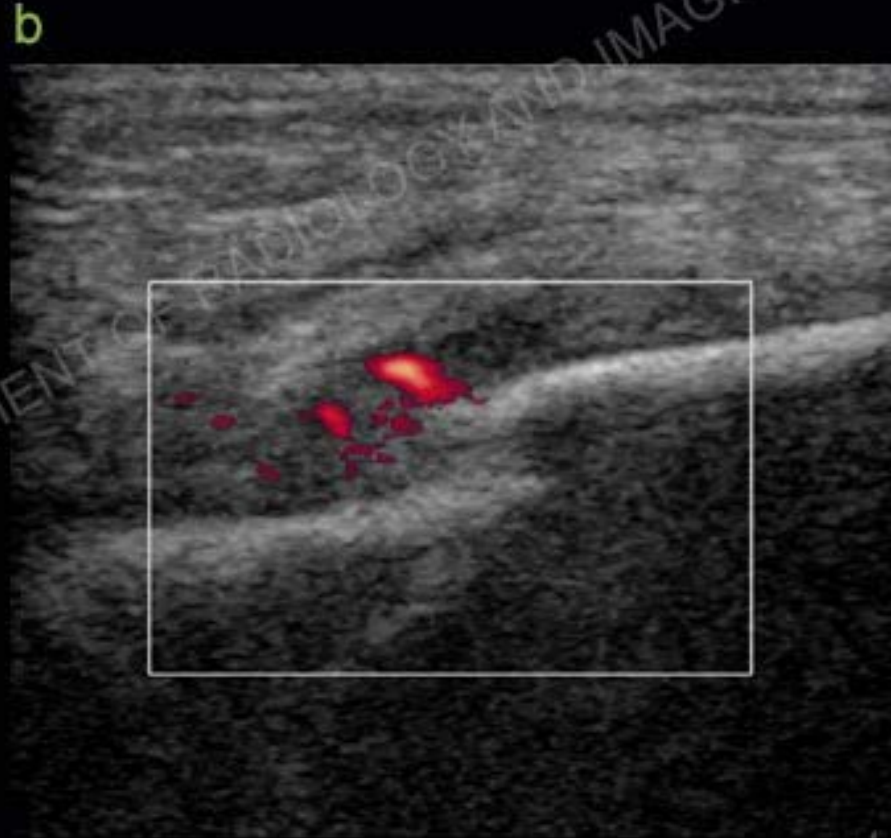
Clinical History

3-day-old newborn with bruising of the right shoulder after difficult vaginal delivery.

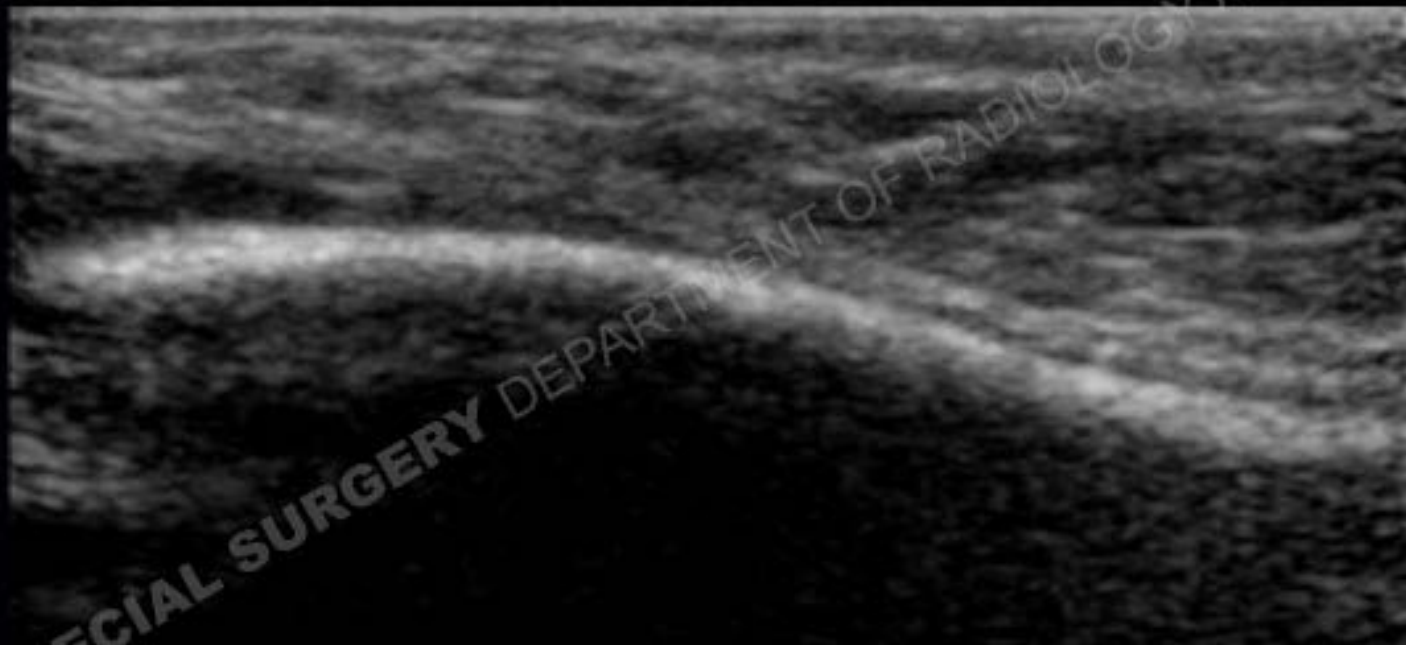
The parents were able to palpate a bump over the bruised site.

Ultrasound was requested to evaluate for a possible clavicle fracture or other pathology.

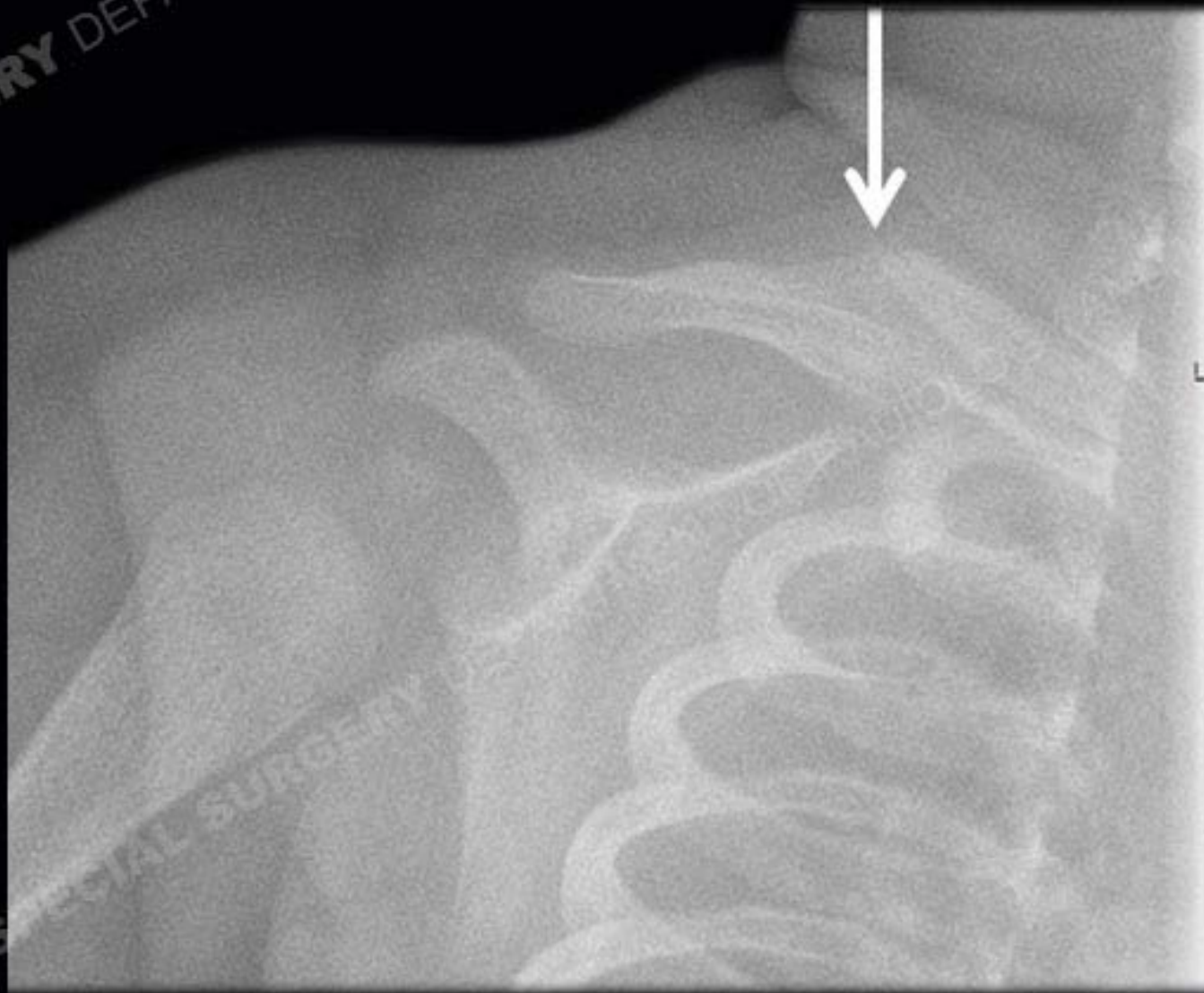




(a) Ultrasound evaluation in the long axis relative to the right clavicle reveals a cortical stepoff along the mid clavicle reflecting a minimally displaced fracture (white arrow) with subjacent soft tissue thickening representing periosteal reaction (yellow arrows). (b) Power Doppler demonstrates increased vascularity within this periosteal reaction indicative of hyperemia.



Ultrasound evaluation of the unaffected left side shows the normal uninterrupted cortex of the left clavicle for comparison.



Follow-up radiograph taken 1 month later showed that the fracture is healing well (white arrow).

Diagnosis: Birth-related clavicle fracture

Discussion

The clavicle is the most common site of birth-related fracture, reported to occur in up to 1 % of vaginal deliveries.

Risk factors for fracture of the clavicle include large size of the baby, forceps delivery, and shoulder dystocia.

Although easily diagnosed by radiographs, ultrasound is an ideal alternative as it is fast, accessible, and most importantly, lacks ionizing radiation.

Additional value of ultrasound is that it can evaluate the soft tissues surrounding the clavicle should the patient's palpable abnormality be caused by an entity other than a clavicle fracture.

