Elevated Skull Fracture

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Skull fractures are classified into linear, depressed and comminuted¹. A depressed fracture is one wherein the fractured fragment in driven inwards. On the other hand, in elevated fracture, this fractured portion is elevated above the level of the intact skull. Few cases highlighting these have been mentioned in neurosurgical literature^{2,3,4}. These fractures are always compound with injury to the underlying dura also. The injury is by a sharp, heavy object which elevates the skull fracture by lateral pull of the weapon while retrieving it, rotation of the head while hitting the skull or while transfer of the patient². These fractures should be managed as open depressed skull fractures. Delay or failure to operate these may result in complications as formation of abscess².

We report a case of a 30 year old male patient who was brought to casualty services following an assault with sword. He was conscious, alert with GCS of 15/15. He had a lacerated wound over right fronto-parietal region with underlying palpable elevated bone margin. There was no cerebrospinal fluid (CSF) leakage from the wound. The computed tomography image showed elevated right frontal bone fracture (Figure 1) with underlying extradural hematoma (EDH). The patient underwent exploration of the wound. Craniotomy was done incorporating the elevated fracture in the flap. The EDH was evacuated (Figure 2). There was bleeding from anterior branch of middle meningeal artery which was coagulated. A small dural tear was seen, which was repaired with pericranial graft. Bone flap was replaced, and wound was closed in layers. At discharge, the wound was healthy with no CSF leak. We report this case to highlight these rare fractures and support the literature that these are compound fractures requiring early surgical intervention.

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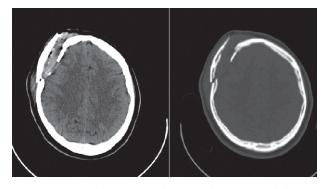


Fig1: CT scan with brain and bone windows. Elevated fracture with underlying extradural hematoma.

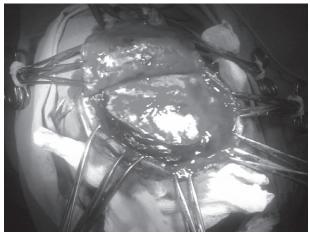


Figure 2: Intra-operative image with elevated bone and underlying hematoma.

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