

Case Report

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Coexisting Traumatic Ipsilateral Extra and Subdural Hematoma- Is It Really Common?



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Introduction

A 37-year old man was admitted in neurosurgical unit after 6 hours of injury with history of road traffic accident and head injury. He was hemodynamically stable. His GCS was E2M5V2. Pupil was reacting bilaterally and there was mild left sided

paucity of movement. There was no other major injury (spine, abdomen, and chest, long bones were normal). CT scan of brain showed extradural hematoma, mass effect, and skull fracture (Figure 1A).

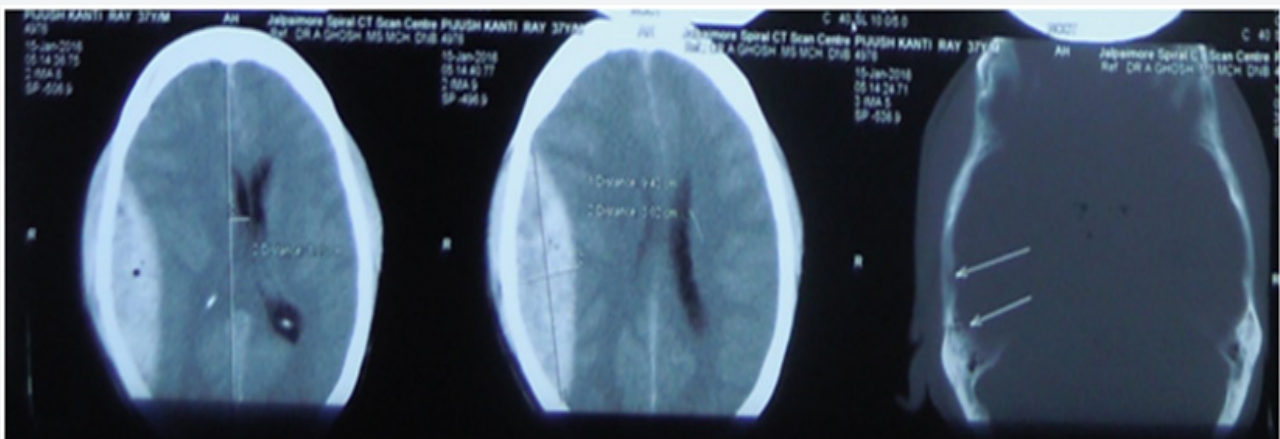


Figure 1A: CT scan of brain showed extradural hematoma, mass effect, and skull fracture.

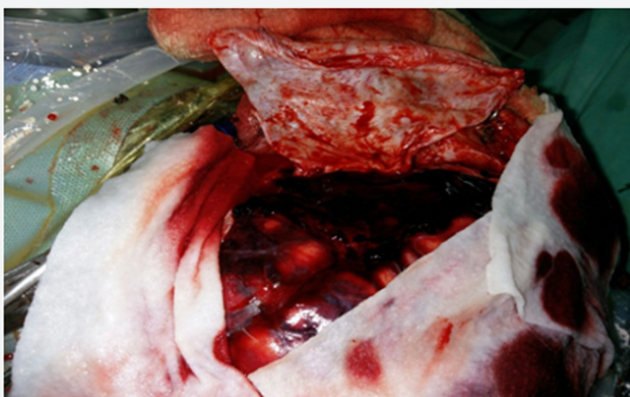


Figure 1B: Dura had been opened and subdural hematoma was seen and evacuated.

Patient was taken for surgery after relevant preanaesthetic investigations within an hour. Right sided fronto-temporo-parietal standard trauma craniectomy was done. After evacuating extradural hematoma, dura was looking bluish and tense. So, dura had been opened and subdural hematoma was seen and evacuated (Figure 1B). After proper hemostasis, augmentation duraplasty was done and bone flap was not replaced, kept in subcutaneous pocket in anterior abdominal wall. Patient was ventilated electively for next 24 hours and then weaned off ventilator. He became conscious, was obeying commands and talking (Figure 1B).

Post-operative CT scan of brain was done which showed craniectomised skull with post-hematoma-evacuated status (Figure 2).

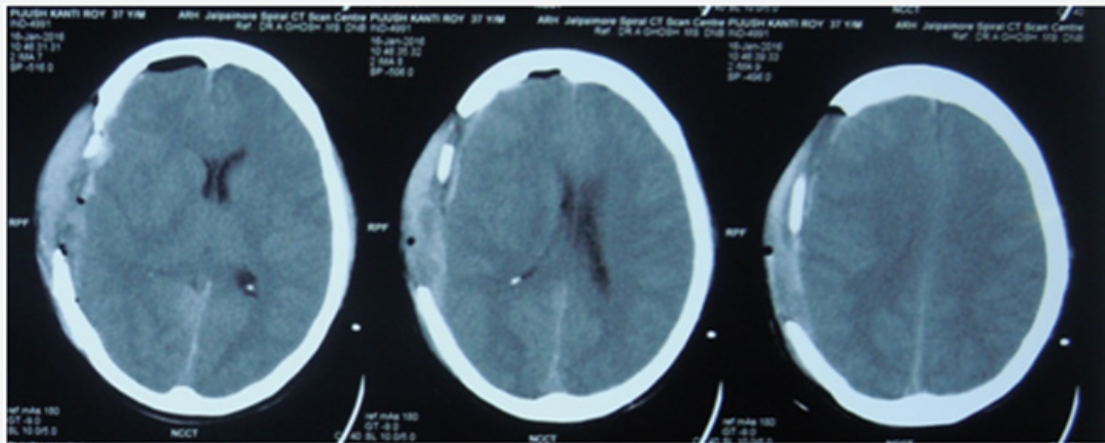


Figure 2: Post-operative CT scan of brain was done which showed craniectomised skull with post-hematoma-evacuated status.

Discussion

Coexisting extradural (EDH) and subdural hematoma (SDH) in the same side is rare phenomenon. As a mechanism, it is unusual to find both EDH and SDH on the same side in patients with head trauma [1]. unless there is direct trauma. Only four case reports have been found [1-4]. More commonly, EDH and SDH happens in opposite locations. EDHs are usually coup lesions and thought to be due to direct trauma with seepage of blood from a calvarial fracture or injury to the dural arteries [4]. Acute SDH, on the other hand, is generally countercoup in location, mostly venous in origin [4], due to brain shift causing damage to the cortical bridging veins [4].

When EDH and SDH happens in the same side, the cause of the EDH is direct injury of dural artery or seepage from fracture and the SDH is also due to direct injury of cortical artery and/or vein. Aim of surgery is evacuation of extra and subdural hematoma, secure haemostasis, and augmentation duraplasty

and also it is always safe to do a standard trauma decompressive craniectomy.

References

1. Sharma AK, Diyora BD, Shah SG, Pandey AK, Mamidanna R (2005) An extradural and subdural hematoma in a neonate. *Indian J Pediatr* 72(3):269
2. Gupta R, Mohindra S, Verma SK (2008) Traumatic ipsilateral acute extradural and subdural hematoma. *Ind J Neurotr* 5: 113-114.
3. B Indira Devi, Arivazhagan A, Mithun G Sattur, Sastry VR Kolluri (2007) Concomitant post-traumatic craniospinal multicompartamental hematoma associated with posterior fossa extradural hematoma - Case report and review of literature. *Indian Journal of Neurotrauma (IJNT)* 4(1): 55-57
4. Venkatesh S Madhugiri, Arivazhagan Arimappamagan, Chandramouli BA (2012) Traumatic epidural and subdural hematomas and extensive brain infarcts in a patient with pial arterio venous malformation: Mechanisms underlying clinical and radiological findings. *Asian J Neurosurg* Oct-Dec 7(4): 210-213.



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