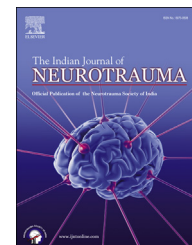


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Letter to the Editor

Acute subdural and intracerebral hematoma in the vicinity of the sylvian fissure

Dear Sir,

Acute subdural hematoma is often associated with disruption of superficial cerebral or cortical veins secondary to head trauma. Rarely this neurosurgical emergency can result from rupture of the perisylvian cortical arteries.¹ A 24 years old male presented with 3 h after road traffic accident while he was riding a bicycle and was hit against divider at a high speed. He was unconscious since the time of injury. There was bleeding from ear and nose, had multiple episodes of vomiting. His general and systemic examination was unremarkable. Neurologically he was deeply comatose (Glasgow coma scale was 4, eye opening – nil, verbal response – nil and motor

response – extension to painful stimuli). Pupils were 3 mm and reacting to light. Endotracheal intubation was performed to secure the airway and the patient underwent urgent computed tomography (CT scan) of the brain. CT scan showed large sylvian fissure hematoma with extension into the temporal lobe and overlying thin left fronto-temporal acute subdural hematoma and diffuse cerebral edema with significant midline shift (Fig. 1). CT scan brain bone window showed extensive fractures of anterior cranial fossa and left temporal bone (Fig. 2). The patient underwent left fronto-temporo-parietal craniotomy and evacuation of hematomas around the sylvian fissure, there was active and brisk bleeding from inside the sylvian fissure that was controlled with Surgicel®.

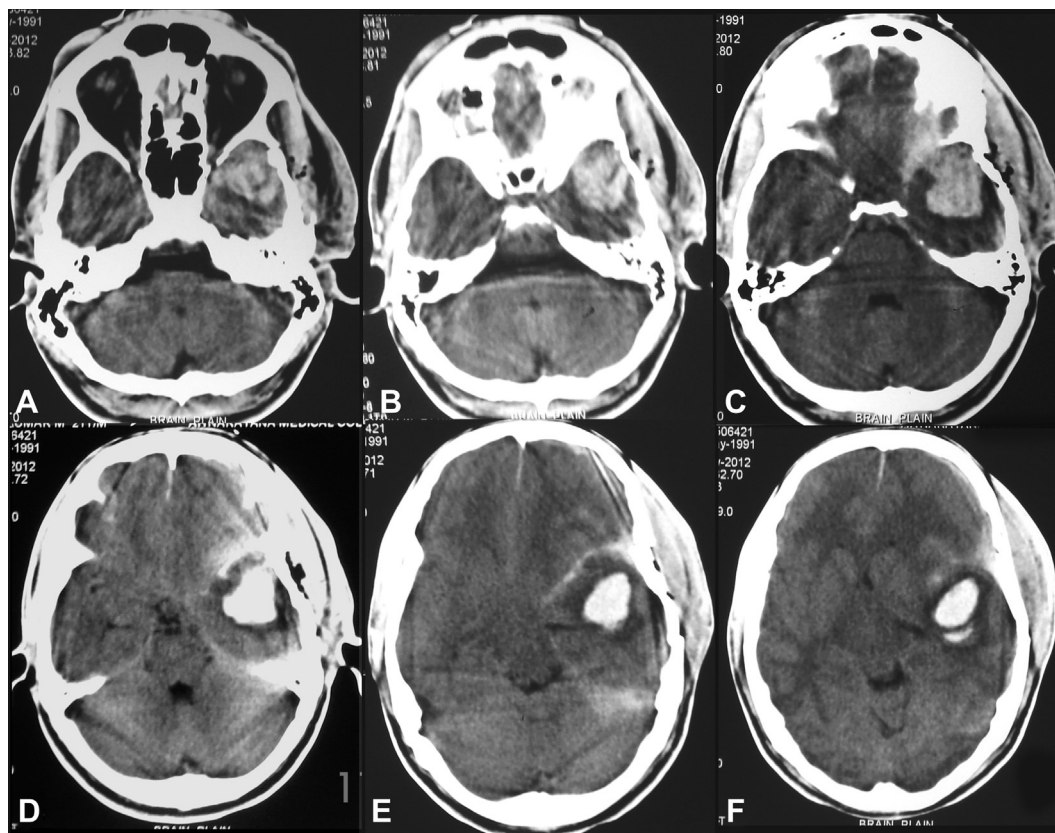


Fig. 1 – (A–F) CT scan showed large sylvian fissure hematoma with extension into the temporal lobe and overlying thin left fronto-temporal acute subdural hematoma and diffuse cerebral oedema with significant midline shift.

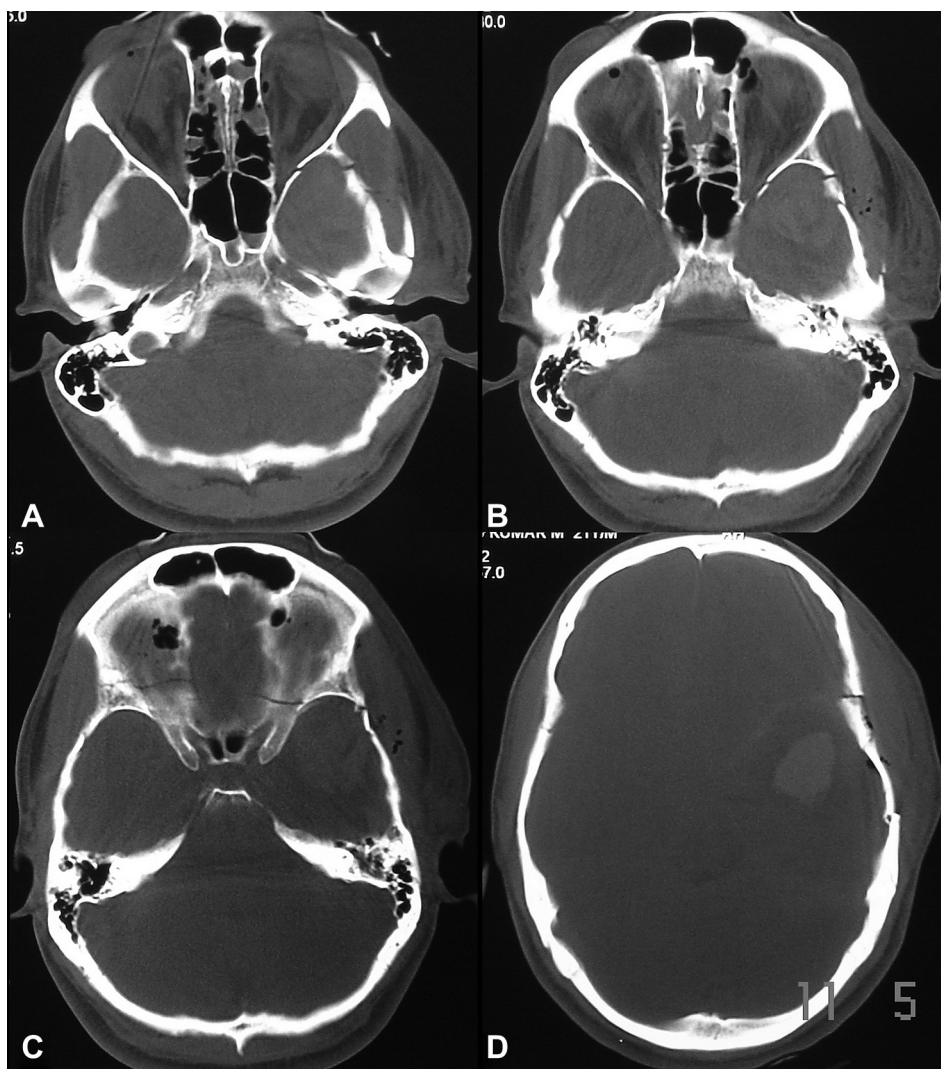


Fig. 2 – (A–D) CT scan brain bone window showed extensive fractures of anterior cranial fossa and left temporal bone.

Following surgery the brain was tense but pulsatile and a lax duraplasty was performed. The patient was kept on elective ventilation but did recover.

Skull base fractures can be associated with potentially devastating injuries to major arteries in the head and neck.² Acute subdural hematoma of arterial origin can result from a ruptured cortical artery that is situated within 3 cm of the sylvian fissure,¹ as small twigs connecting to the dura mater that branched perpendicularly from the cortical arteries can be torn by the shearing forces leading to hemorrhage.³ In present case probably the shearing forces because of sphenoid wing fracture would have resulted in the injury of left sylvian fissure vessels with resultant subdural and intracerebral hematoma. Once a large hematoma in the vicinity of sylvian fissure is recognized a large craniotomy over the Sylvian fissure to obtain hemostasis of bleeding points has been recommended.^{1,4–6} The reported mortality in acute subdural hematomas varies between 50% and 90%⁴ and the possible factors for higher mortality include delay in diagnosis, arterial origin of the hemorrhage,⁶ poor neurological status and high intracranial pressure may be because of massive hemorrhage.³

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Amit Agrawal*

Professor of Neurosurgery, Department of Neurosurgery, Narayana
Medical College Hospital, Chinthareddypalem, Nellore 524003,
Andhra Pradesh, India

Surya Pratap Singh

Resident of Neurosurgery, Department of Neurosurgery, Narayana
Medical College Hospital, Chinthareddypalem,
Nellore, Andhra Pradesh, India

*Corresponding author. Tel.: +91 8096410032 (mobile).

E-mail addresses: dramitagrawal@gmail.com,
dramit_in@yahoo.com

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