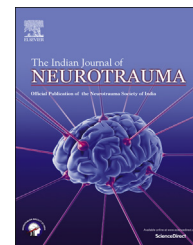


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Letter to the Editor

Traumatic subarachnoid hemorrhage masquerading as aneurysmal subarachnoid hemorrhage



Keywords:

Traumatic subarachnoid hemorrhage
 Aneurysmal subarachnoid hemorrhage
 Angiogram

Sir,

The most common causes of subarachnoid hemorrhage (SAH) are head injury and rupture of an intracranial aneurysm. Traumatic SAH must be distinguished from aneurysmal SAH. This distinction can be difficult to make, because the traumatic event may not have been witnessed. There is often a question as to whether a spontaneous SAH has caused a traumatic event or the trauma caused the hemorrhage.

A 35-year-old man was found lying unconscious by the side of road in morning. At admission to casualty, his Glasgow coma scale (GCS) score was 8. The plain computed tomography (CT) scan showed cisternal and bilateral Sylvian fissure SAH, intraventricular hemorrhage (IVH), and left frontal intracerebral hemorrhage (ICH) (Fig. 1). As SAH was thick and associated with ICH, CT angiogram was done. The CT angiogram showed left internal carotid artery (ICA) bifurcation aneurysm directed superiorly and medially. The working diagnosis was aneurysmal SAH resulting in fall causing head injury. A left pterional craniotomy was done. On complete dissection of ICA bifurcation, the aneurysm was found unruptured with no communication to frontal ICH. The aneurysm was clipped using 5 mm mini straight clip, and ICH evacuated. Post-operative course was uneventful and patient recovered well, without neurological sequelae.

The presence of following features is in favor of aneurysmal SAH: IVH, ICH, thickness of SAH over 1 mm, bilateral sylvian SAH, and multiple cisternal SAH.¹ Our case had all the findings favoring aneurysmal SAH, hence we did CT angiogram. The incidence of aneurysms in patients with traumatic SAH is 8%–11.2%.^{2,3} If a saccular cerebral aneurysm is found on angiogram after a patient has been injured, it is often difficult to know if the aneurysm is incidental, caused the SAH

and trauma, or bled as a result.⁴ In our case the aneurysm was incidental, and final diagnosis was traumatic SAH.

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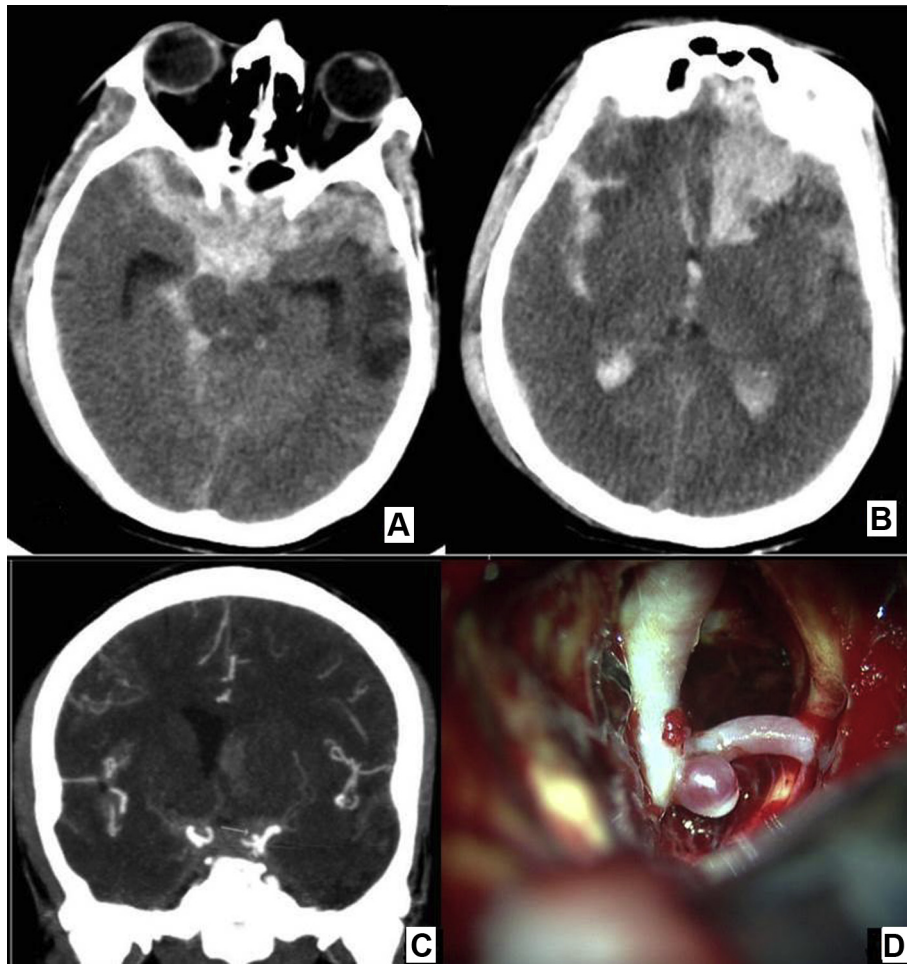


Fig. 1 – A and B: Plain CT scan axial section showing SAH in bilateral sylvian fissure and basal cistern, IVH, and left frontal ICH. **C:** CT angiogram, coronal section aneurysm at left ICA bifurcation. **D:** Operative photograph showing unruptured aneurysm at left ICA bifurcation.