

## INTRACRANIAL ANEURYSM WITH ASSOCIATED SUBDURAL HEMATOMA: AN UNCOMMON PRESENTATION

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### ABSTRACT

Intracranial aneurysm presenting with subarachnoid hemorrhage is a common presentation. But chronic subdural hematoma with underlying aneurysm is seen uncommonly. We herewith present a patient who presented with headache. MRI and MRA brain picked up chronic subdural hematoma with anterior communicating artery aneurysm. Patient underwent single sitting craniotomy and clipping of aneurysm with contralateral burr holes and evacuation of subdural hematoma. Patient had a remarkable postoperative recovery and is doing well. This uncommon association is seen quite infrequently seen and our case is one of them.

**KEYWORDS:** Subdural hematoma, aneurysm.

### INTRODUCTION

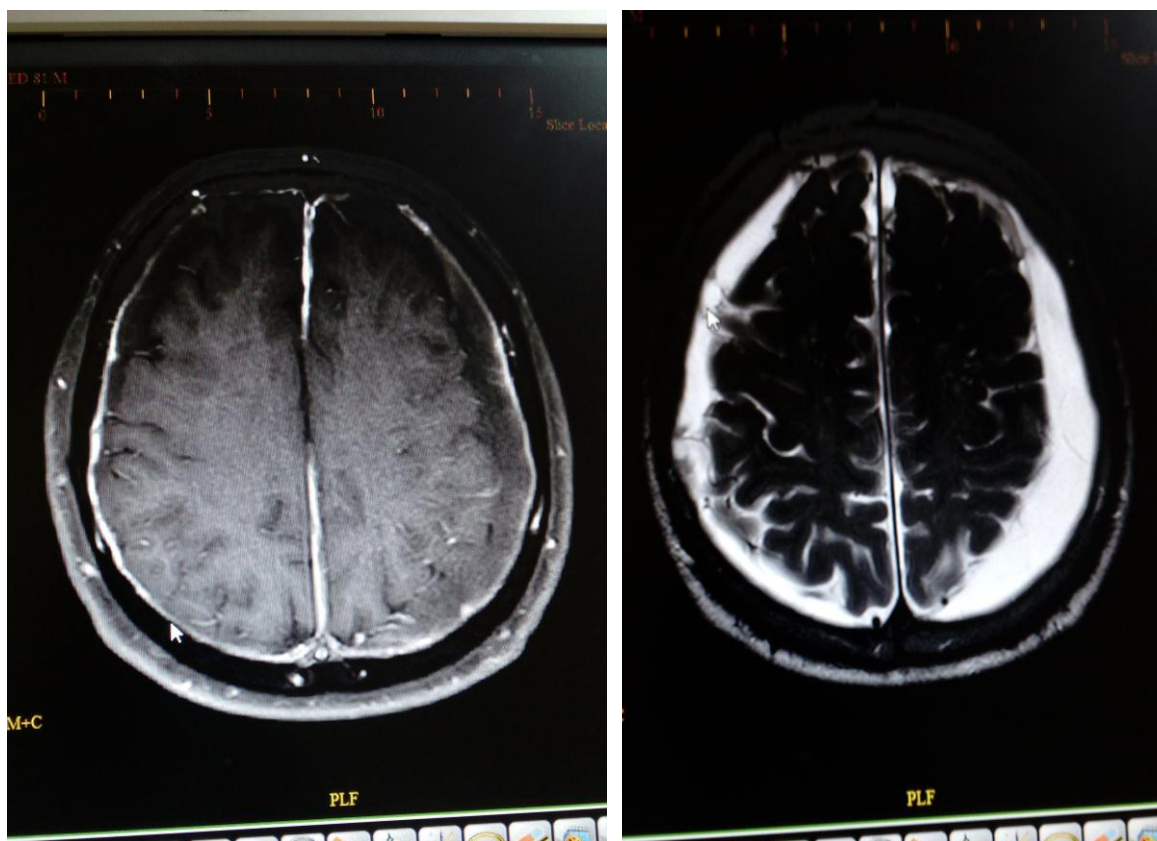
Subarachnoid hemorrhage remains the usual presentation of an aneurysm. Incidental aneurysms are also well reported. Patient having an aneurysm and subdural hematoma is the presentation in our patients. Surgical clipping of aneurysm and burr hole evacuation of chronic pain subdural hematoma was the treatment offered. Patient doing well in follow up period.

## MATERIAL AND METHODS

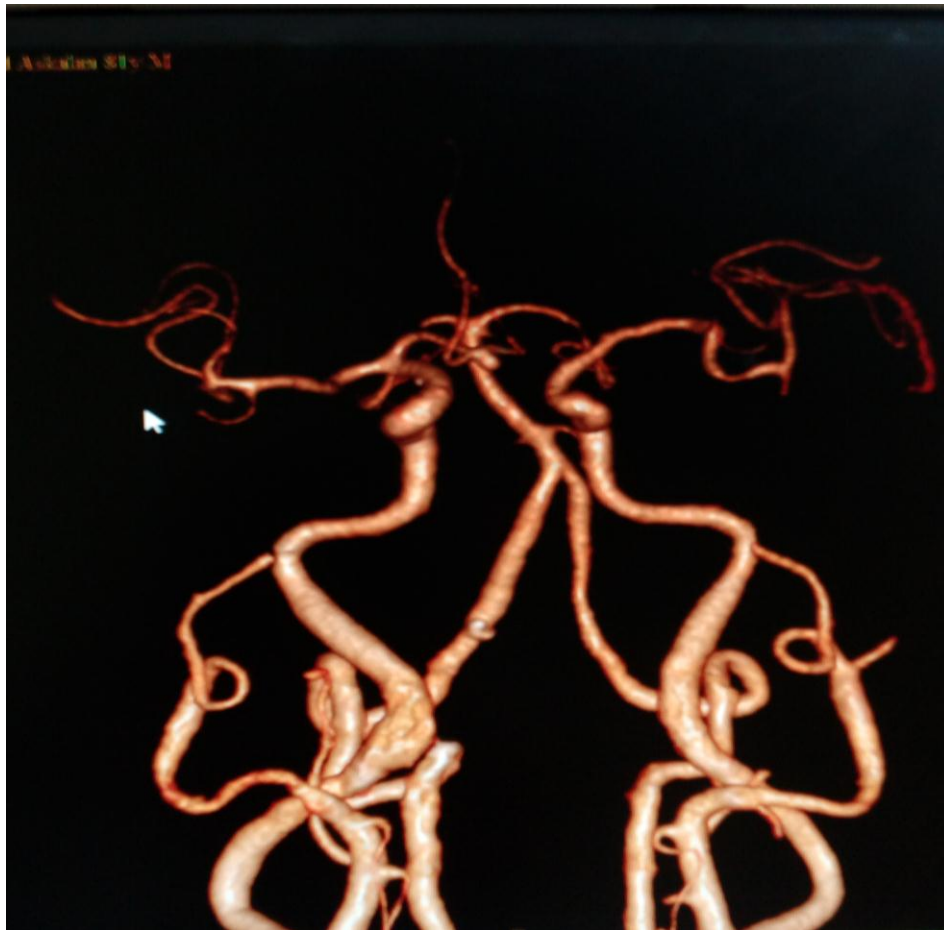
Our patient presented with history of headache and dizziness for a month. Examination did not reveal any gross neurodeficit. To rule out any organic lesion patient underwent MRI brain. To our surprise there was chronic subdural hematoma bilateral, significant on left side with pressure effect. Being elderly to rule out any vascular association MRA was also part of study. And there was incidental anterior communicating artery aneurysm. CT angiogram was done to see exact morphology of the aneurysm and was a small downward pointing fusiform aneurysm.

## RESULTS

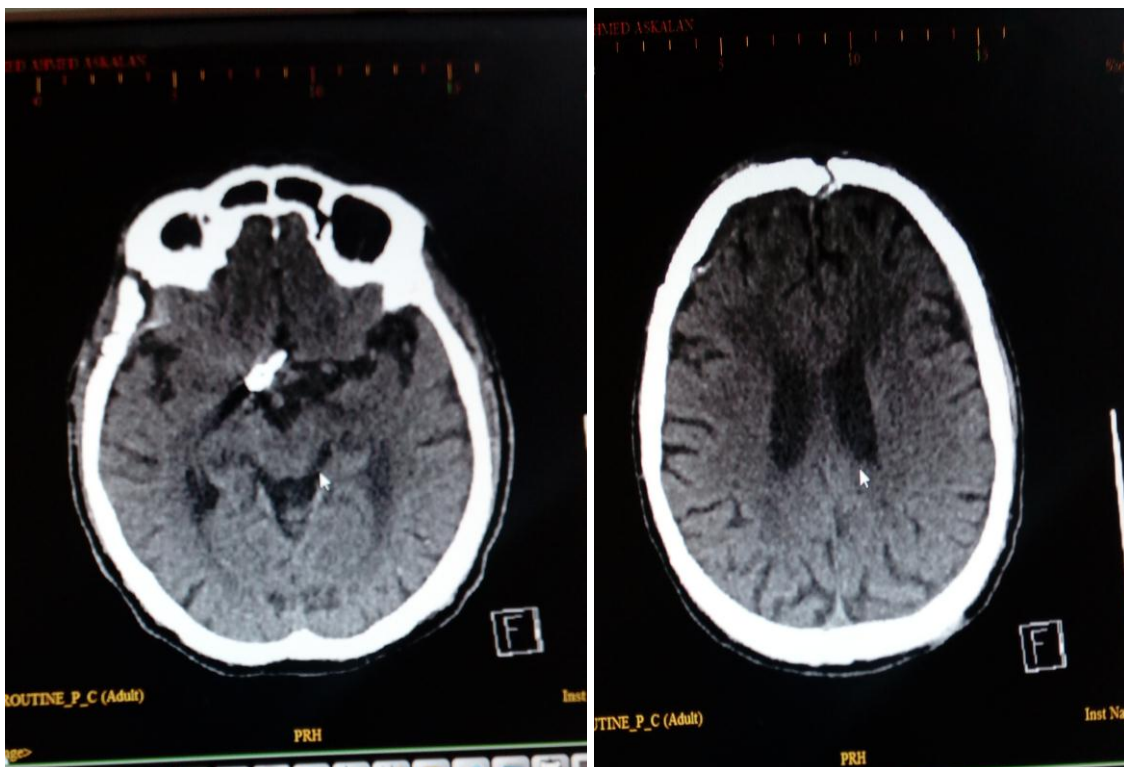
A detailed discussion was done with family explaining the nature of disease and treatment options available. As surgical evacuation of subdural was needed hence surgical clipping of aneurysm was also planned in same sitting explaining all possible risks and benefits. Once family was on board patient underwent right pterional craniotomy and clipping of ACOM aneurysm and right sided burr holes and evacuation of subdural hematoma. Postoperative period was uneventful and patient made a remarkable recovery. Patient is on follow up with us in out patient department.



**Fig 1: Preoperative MRI showing chronic subdural hematoma.**



**Fig 2** CT angiogram showing ACOM aneurysm.



**Fig 3:** Post operative CT showing evacuated subdural hematoma and clipped aneurysm.

## DISCUSSION

In review of literature Katai MJ in 2018 reported bilateral acute subdural hematoma secondary to rupture of an anterior communicating artery aneurysm.<sup>[1]</sup> Thapa A same year reported pure acute-on-chronic subdural hematoma due to ruptured posterior communicating artery Aneurysm.<sup>[2]</sup> Verhey LH in also in 2018 reported two saccular cortical aneurysm rupture causing acute subdural hemorrhage.<sup>[3]</sup> Araki T in 2002 had reported internal carotid-posterior communicating artery aneurysm presenting pure acute subdural hematoma.<sup>[4]</sup> Otsuka H in 2016 reported ruptured internal carotid-posterior communicating artery aneurysm associated with acute subdural hematoma, extending from the interhemispheric space to the posterior fossa.<sup>[5]</sup> Mansour O in 2014 also reported acute aneurysmal bilateral subdural hematoma without subarachnoid hemorrhage.<sup>[6]</sup>

## CONCLUSION

To conclude aneurysmal rupture has been presenting in the literature in various manner but subarachnoid hemorrhage being the commonest one. Subdural hemorrhage either acute or chronic also remains one of the uncommon presentation. Surgical intervention for subdural hematoma along with clipping remained the common management protocol. Our patient had presented in the similar manner and imaging revealed two pathologies which were treated surgically with a fair outcome.

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