

A rare manifestation of subarachnoid hemorrhage: A case report

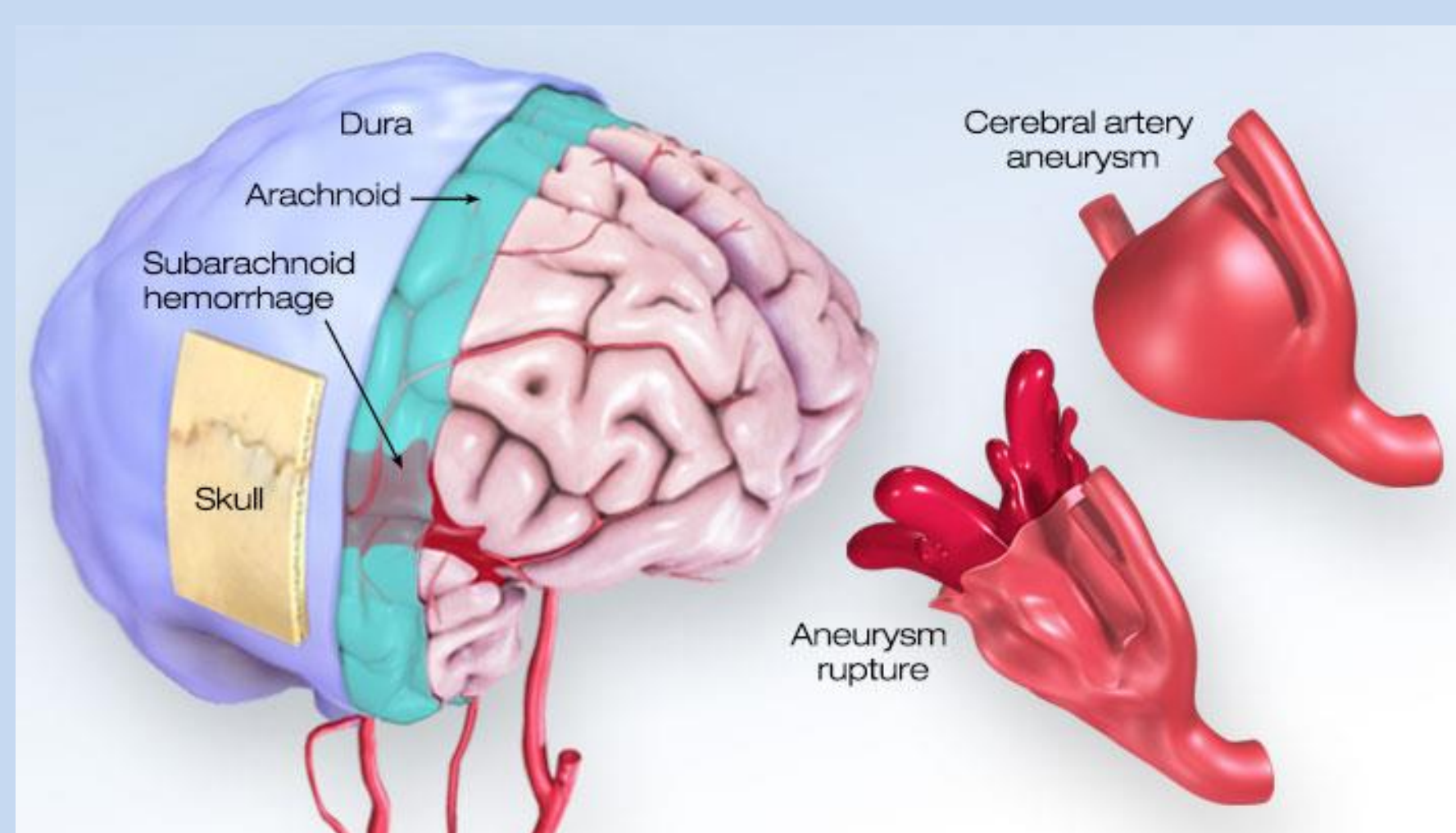
Vafadar Moradi Elnaz¹, Bahar Vahdat Humain², Rezvani Kakhki Behrang^{1*}, Habibzadeh Seyed Reza¹, Sadrzadeh Sayyed majid¹

¹Department of Emergency Medicine, Faculty of Medicine, Mashhad University of Medical sciences, Mashhad, Iran

²Department of Neurosurgery, Faculty of Medicine, Mashhad University of medical Sciences, Mashhad, Iran

Background:

Bleeding is a critical sign in many patients and continuous or recurrent hemorrhage leads to emergency department (ED) visits. Epistaxis alone is a common problem, but when it presents with simultaneous otorrhagia become a very unpleasant event. Spontaneous epistaxis and otorrhagia necessitate imaging assessment to identification of underlying cause. A ruptured aneurysm or a possible underlying SAH should could be presented by either sudden onset severe headache or insidious symptoms like spontaneous epistaxis or otorrhagia. In 8-10% of patients with SAH, there is no underlying cause such as aneurysm or vascular malformation



Patients & Methods :

A 57-years- old woman was presents to our Emergency Department with chief complain of spontaneous otorrhagia and epistaxis. There was no history of trauma or medical usage. Her vital signs on admission were normal with Glasgow Coma Scale score was 15. She had bilateral epistaxis and otorrhagia from right ear. ENT examination reveal a normal tympanic membrane with bloody otorrhagia in the left external auditory canal. The brain spirals axial brain CT scanning had shown spontaneous subarachnoid hemorrhage (SAH) in the upper right hemisphere (Figure1)and the brain CT angiography revealed no pathological findings (Figure2).

Results & discussion :

We report a rare manifestation of SAH in middle-aged woman. Simultaneous presentation of epistaxis and otorrhagia is a rare clinical finding. Relationship between the clinical presentation and the SAH is key in this case report and should be developed as for the etiology of the SAH. It is likely the at the moment of the bleeding, the patient developed a sudden increase in blood pressure which might have induced the epistaxis. Epistaxis and otorrhagia can be first manifestation of hereditary hemorrhagic telangiectasia(HHT) and should be fully evaluated. An internal carotid aneurysm also may cause otorrhagia, and CTA is a technique of choice to evaluate these patients. Our patient does not have a history of a head trauma, surgery, hearing loss or HHT. Actually, atypical symptoms other than headache, like our patient, abundantly reported recently. Our patient has a rare manifestation of SAH; she had spontaneous epistaxis and otorrhagia and she has no pathological findings on brain CT and CTA. In these situations, cerebral angiography may be helpful to determine small aneurysm but our patient did not give consent for cerebral angiography.

Figure 1:Spiral Axial Brain CT demonstrating SAH in the upper right hemisphere

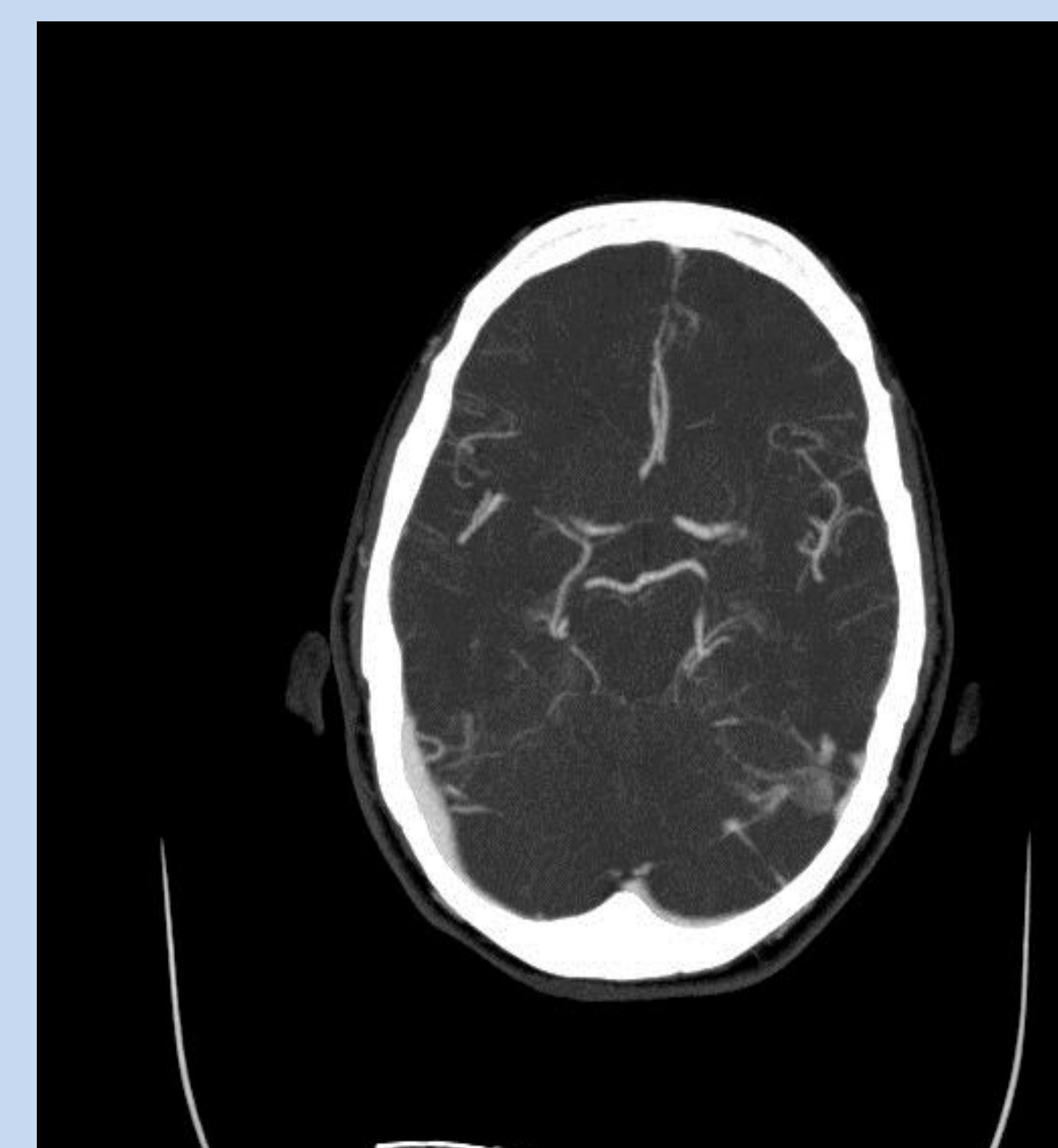
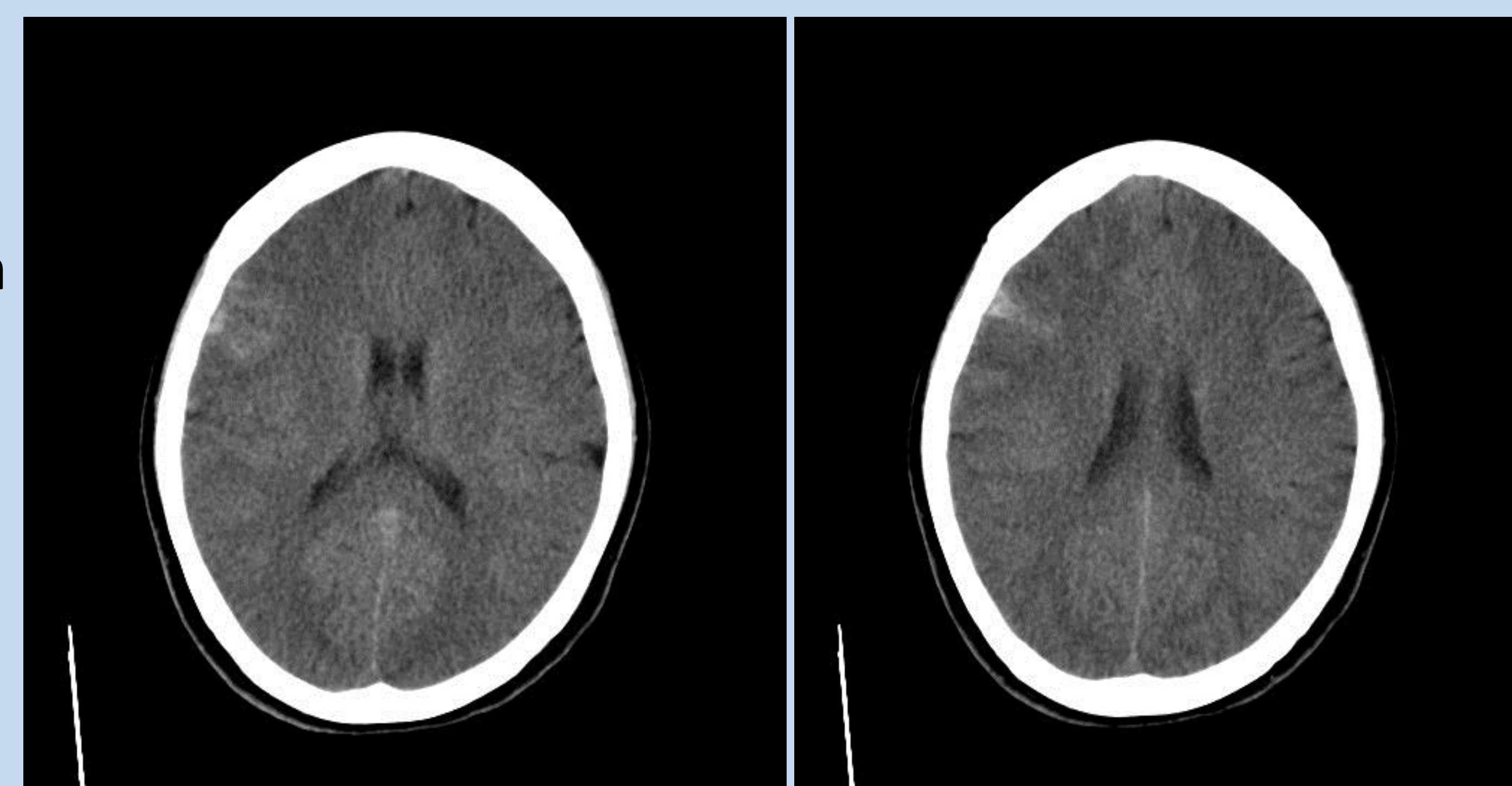


Figure2: Normal brain CT angiography

Conclusion & perspectives :

History taking is a crucial part of evaluating patients with bleeding, previous history of coagulopathy or craniofacial trauma. Coagulopathy is another probable pathology in these cases and should be rolled out with laboratory investigation and previous history. In our case normal platelet count, normal BT and normal range PT and INR were reported. Epistaxis and otorrhagia should never be neglected in any patients and further investigations include imaging and laboratory tests should have performed.

Acknowledgement:

The authors thank the personnel in the Emergency Department at Ghaem Hospital for their assistance during the course of this research.