



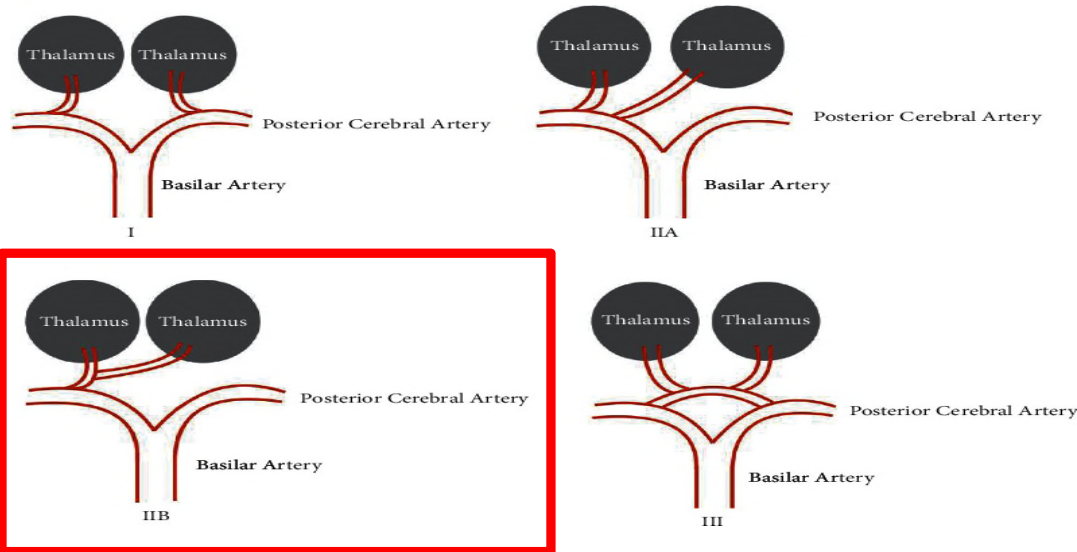
Bilateral thalamic infarction due to occlusion of artery of Percheron after embolization of ruptured basilar tip aneurysm

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Introduction

- **Artery of Percheron**
 - a rare anatomic variant where bilateral medial thalami are supplied by a single posterior cerebral artery branch
 - occlusion causes infarction to bilateral thalami



Artery of Percheron variant

Anatomy of thalamic arterial supply variants

Charles Donohoe, Nooshin Kiani Nia, Patricia Carey, and Vmasi Vemulapalli. Artery of Percheron-Infarction: A Case Report of Bilateral Thalamic Stroke Presenting with Acute Encephalopathy. Case Rep Neurol Med. 2022; 8385841

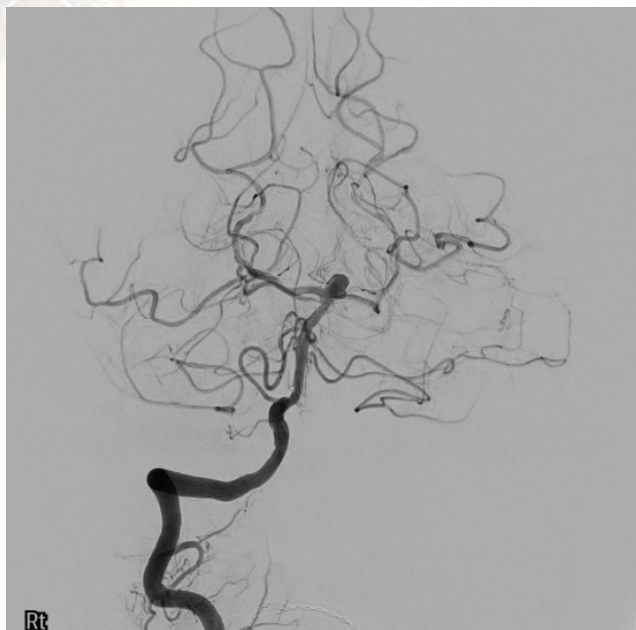
Case presentation

- 64 year old female
- Presented with sudden onset headache and dizziness
- CT and CT angiography : SAH, aneurysm at basilar tip



Case presentation

- Transfemoral catheter angiography showing wide-necked ruptured basilar tip aneurysm with multiple adjacent basilar perforators

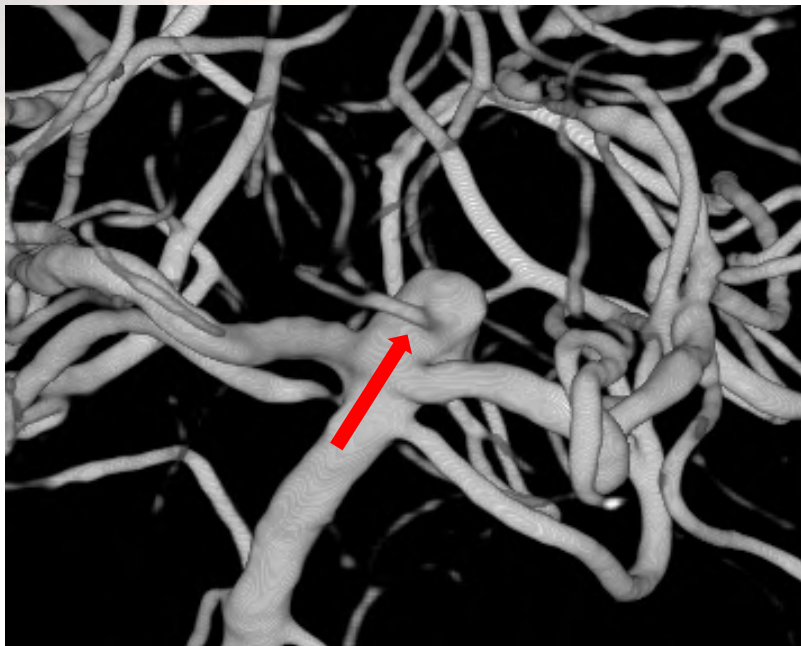


AP view



Lateral view

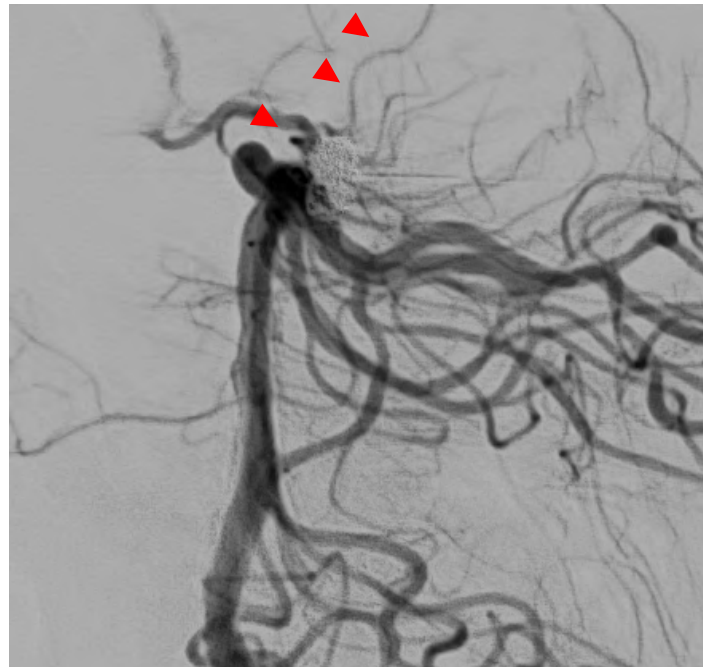
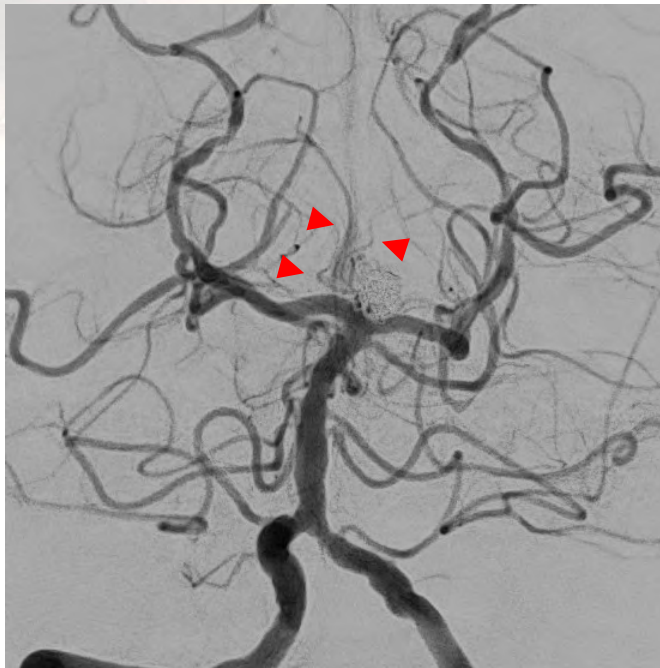
3D reconstructed image of artery of Percheron arising from the neck of aneurysm



A basilar tip aneurysm of size 6.3mm x 4.2mm with neck diameter of 4.3mm with perforator(artery of Percheron) arising from neck of aneurysm

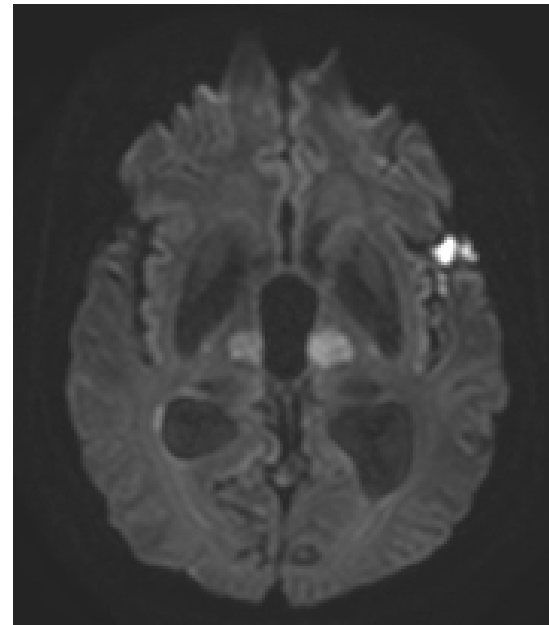
Result of embolization

- Coil embolization was done with double catheter technique with cautious preservation of artery of Percheron



Post-embolization AP and lateral angiograms with preserved artery of Percheron flow

- Patient showed aphasia and confused mentality at post-embolization day 5



CT and diffusion MRI shows infarction at bilateral thalami area

- After 4 months, patient recovered having only mild cognitive dysfunction and slow independent gait.



Conclusion

- Artery of Percheron is a rare anatomic variant where only few cases are reported with clinical relevance.
- Even with cautious embolization, occlusion of artery of Percheron occurred at post-op day 5 resulting in bilateral thalami infarction and deterioration of patient status.
- Fare clinical outcome was achieved after conservative management of bilateral thalamic infarction due to occlusion of artery of Percheron.