



Acute Subarachnoid Hemorrhage due to Ruptured Brain Aneurysm – endovascular coiling

DIVISION OF INTERVENTIONAL NEURORADIOLOGY

Presents a patient case treated by the team members of the division and physicians and staff of the UCLA Comprehensive Stroke Center

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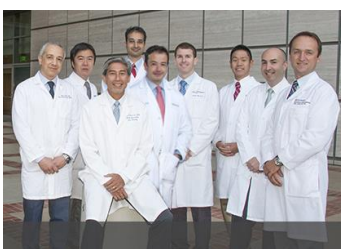
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PATIENT PRESENTATION:

- 48-year-old woman presented to an outside hospital with severe headache, neck pain and vomiting
- Initial CT of head showed diffuse subarachnoid hemorrhage
- CTA was concerning for a left Posterior communicating artery (Pcomm) aneurysm
- Division of Interventional Neuroradiology was contacted and the patient was urgently transferred for acute endovascular coiling

EVALUATION AND IMAGING:

- On arrival, the patient was clinically stable, with severe headache, but no neurological deficit
- We performed catheter angiogram within 2 hours of arrival and confirmed a 5.5mm left Pcomm aneurysm (Figures 1 and 2)

INTERVENTION:

- Endovascular coiling was performed in the same session, with complete aneurysm occlusion within 2.5 hours of the transfer (Figures 3 and 4)

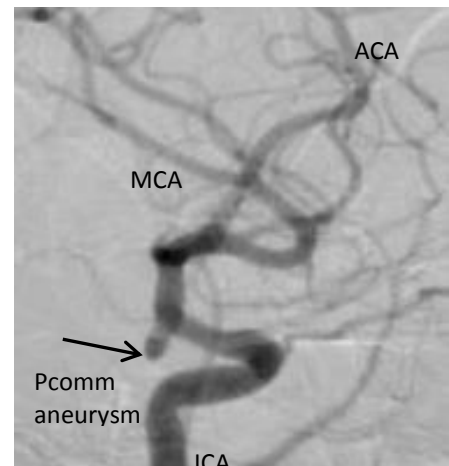


Figure 1: Initial angiogram, lateral view. Ruptured Posterior communicating artery aneurysm (Pcomm, arrow). ICA – Internal Carotid Artery, ACA – Anterior Cerebral Artery, MCA – Middle Cerebral Artery

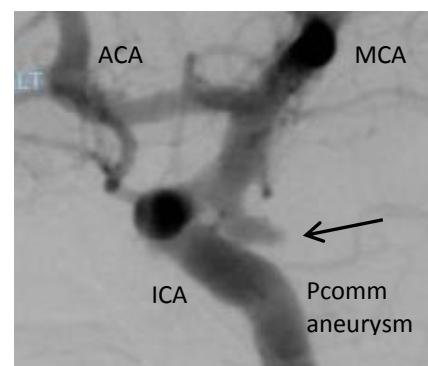


Figure 2: Initial angiogram, antero-posterior oblique view. Ruptured Posterior communicating artery aneurysm (Pcomm, arrow). ICA – Internal Carotid Artery, ACA – Anterior Cerebral Artery, MCA – Middle Cerebral Artery



Before coiling

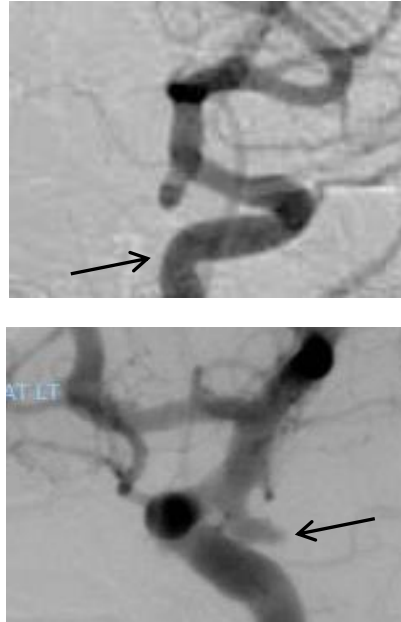


Figure 3: Initial angiograms – BEFORE COILING, lateral (upper figure) and antero-posterior oblique view (lower figure). Ruptured Posterior communicating artery aneurysm (arrow).

After coiling



Figure 4: Final angiograms – AFTER COILING, lateral (upper figure) and antero-posterior oblique view (lower figure). Occluded Posterior communicating artery aneurysm filled with coils (arrow).

PATIENT OUTCOME:

- The patient tolerated the procedure without any complications. After completing neurological observation and monitoring for cerebral vasospasm, she was transferred to the floor.
- Upon completing her recovery, she was discharged home with no neurological deficits, post-coiling day 9

Division of Interventional Neuroradiology – A Leader in Neurovascular Care and Research

- Invented the Merci retriever – the 1st endovascular device for acute stroke therapy
- Invented GDC and Matrix coils – the leading tool for aneurysm treatment around the world
- Developed Onyx liquid embolic material – the leading therapy for brain vascular malformations

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