



Patient with recurrent aneurysm/segmental disease treated with Pipeline device

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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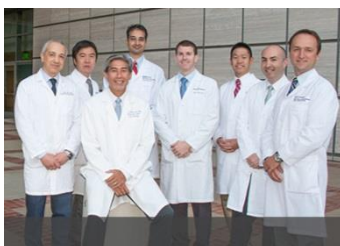
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PATIENT PRESENTATION

Middle aged female with left posterior communicating artery aneurysm rupture 10 years ago with new dizziness which prompted new imaging which disclosed new/recurrent aneurysm.

EVALUATION AND IMAGING

Angiogram shows clip on opposite side of new aneurysm. This is because the entire segment of artery is abnormal: Segmental disease.

INTERVENTION PERFORMED

Since there is Segmental disease, the entire artery needs reconstruction. This can be accomplished with the new generation of flow diverting stents. In this case, the Pipeline device was used with coiling.

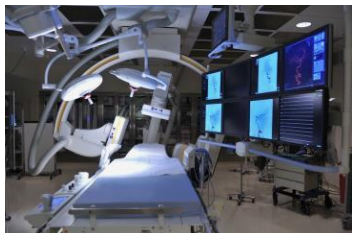


Figure 1: CTA shows new/recurrent aneurysm (arrow) and prior aneurysm clip (arrowhead).



Figure 2: 3D rotational angiogram reconstruction showing the prior clip (arrow) opposite the newly formed aneurysm (line indicating neck of aneurysm), indicative of segmental disease of the artery, thus requiring arterial reconstruction.

(over)



PIPELINE DEPLOYMENT

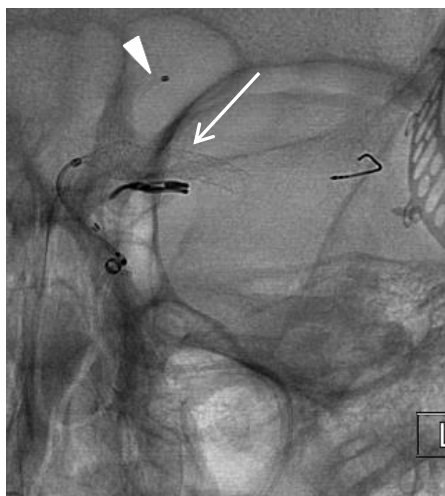


Figure 3: Pipeline device being deployed (arrow) with additional catheter (arrowhead) in aneurysm for later coiling. This is done to protect the aneurysm during the antiplatelet treatment required to prevent clot formation on the implanted Pipeline device.

COIL EMBOLIZATION



Figure 4: Pipeline and coils (arrow) in place.

Procedures provided by DINR for adult and pediatric patients

Acute Ischemic Stroke

- Acute Thrombectomy/Thrombolysis
- Extra/Intracranial Angioplasty/Stenting

Brain Hemorrhage, Aneurysm/AVM/fistulae

- Aneurysm coiling
- Stent/balloon assisted aneurysm coiling
- Flow diverter stent device embolization
- AVM/Dural fistulae embolization
- Venous Sinus Thrombectomy/Thrombolysis
- Direct transcatheter embolization

Chronic Occlusive Cerebrovascular Disease

- Extra/Intracranial Angioplasty/Stenting
- Venous Sinus Angioplasty/Stenting

Head/neck/orbit tumors & vascular malformations, epistaxis

- Endovascular embolization
- Direct percutaneous embolization

PATIENT OUTCOME

The patient tolerated the procedure well and was discharged the next day. In order to prevent blood clot forming on the Pipeline, the patient will need aspirin and Plavix for 3 to 6 months. The supplemental coiling helps to prevent aneurysm rupture while on the antiplatelet agents.

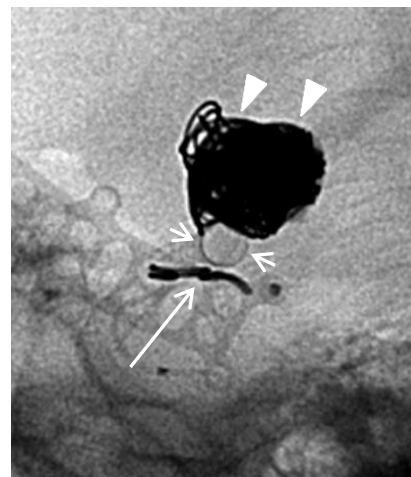


Figure 5: Final angiogram: "down the barrel" view of Pipeline (small arrows), clip on bottom (long arrow) and coils on top (arrowheads) showing reconstruction of artery by the Pipeline Flow Diverter.

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



**American Heart Association
American Stroke Association
CERTIFICATION**
Meets standards for
Comprehensive Stroke Center

