



Routine Headache Leads to Diagnosis & Treatment of Unruptured Aneurysm

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

GARY DUCKWILER, MD
Director and Professor

REZA JAHAN, MD
Professor

SATOSHI TATESHIMA, MD, DMSc
Associate Professor

VIKTOR SZEDER, MD, PhD, MSc
Assistant Professor

MAY NOUR, MD, PhD
Assistant Professor

FERNANDO VINUELA, MD
Professor Emeritus



PATIENT PRESENTATION

- 68 year old woman with no vascular risk factors and history of headaches which had changed in nature was referred by her primary doctor for parenchymal and vascular imaging of the brain. Imaging revealed an unruptured aneurysm of the right MCA.

EVALUATION AND IMAGING

- CTA of the brain demonstrated an MCA bifurcation aneurysm in the right hemisphere, which had previously ruptured measuring approximately 7.50 mm x 5.37 mm in size.
- This represented an incidental finding unrelated to her headache presentation.

INTERVENTION PERFORMED

- The decision for treatment was based on her relatively young age, size of the aneurysm as well as specifically—shape of the aneurysm containing multiple blebs which were seen and forebode a likely increased risk of rupture.

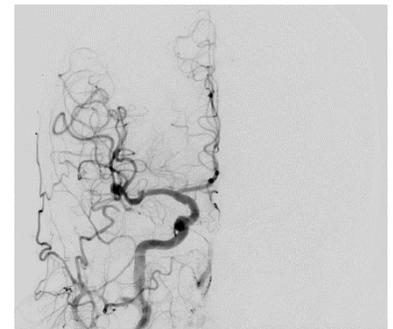


Figure 1: CCA Injection showing right MCA bifurcation aneurysm



Figure 2: 3D Reconstruction showing right MCA bifurcation aneurysm identified with multiple blebs

INTERVENTIONAL NEURORADIOLOGY



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



Division of Interventional Neuroradiology
David Geffen School of Medicine at UCLA
Ronald Reagan UCLA Medical Center
757 Westwood Plaza, Suite 2129
Los Angeles, CA 90095-7437
www.aneurysm-stroke.com

TREATMENT

- Given the location of the aneurysm at the MCA bifurcation, attention was focused on embolization without posing a risk for thromboembolic complications to the nearing MCA branches. The coil embolization was performed with stent assistance using LVIS-Jr stent. The patient had been placed on aspirin 325 mg and Plavix 75 mg for the duration of 5 days prior to the procedure.
- Embolization was successful and the final angiogram showed only a small degree of contrast opacification at the aneurysm base.



Figure 3: LVIS Jr stent delivered and aneurysm coiling initiated through second microcatheter

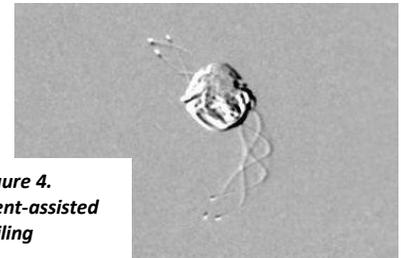


Figure 4. Stent-assisted coiling

PATIENT OUTCOME

- The patient tolerated the procedure well and was discharged home the following day.
- Dual antiplatelet therapy will be continued for 3 months, with discontinuation of Plavix to follow and a 6 months follow-up angiogram is planned to assess for aneurysm filling

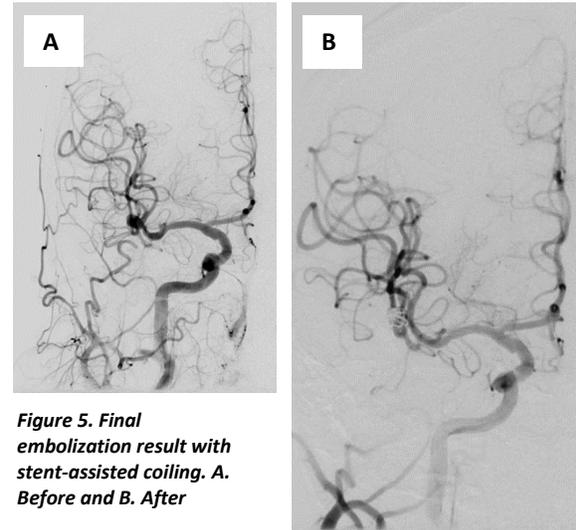


Figure 5. Final embolization result with stent-assisted coiling. A. Before and B. After

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

