Double Vision Saves Patient From Imminent Aneurysm Rupture

**Patient Presentation**
- 57-year-old woman with no aneurysm development risk factors and a vascular risk factor of dyslipidemia presenting with a 3-week history of right eye ptosis, ophthalmoplegia and diplopia. She was diagnosed with a pupil-involving 3rd nerve palsy. Worrisome for a vascular process, she was referred by her ophthalmologist for vascular imaging.

**Evaluation and Imaging**
- Non-contrast CT of brain showed no parenchymal lesions and CTA suggested a multi-lobulated aneurysm of the right posterior communicating artery, best seen on diagnostic angiogram (Fig. 1).

**Intervention Performed**
- Treatment was aimed at securing the proximal aneurysm sac and neck, leading to stagnation in the distal, contained rupture sac, thereby alleviating mass effect on the oculomotor nerve.
- Balloon assisted coil embolization was performed with successful embolization of the aneurysm and significant stagnation in the contained rupture sac (Fig. 2, 3, 4).
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 transcutaneous embolization

Chronic Occlusive Cerebrovascular Disease
Extra/Intracranial Angioplasty/Stenting
Venous Sinus Angioplasty/Stenting

Head/neck/orbit tumors & vascular malformations, spina bifida
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

24/7 Contact & Appointment
(310) 267-8761 or 8762

PATIENT OUTCOME

- The patient tolerated the procedure well.
- She was started on a steroid taper in an attempt to improve her 3rd nerve palsy and although she did not immediately clinically improve from an ocular standpoint, we expect the improvement to occur over a few month period.
- Her presenting clinical symptoms allowed for discovery of the aneurysm and she imminently escaped the deleterious outcome of aneurysmal rupture.
- A 6 month follow-up angiogram is planned.

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

Figure 3: Post embolization, unsubtracted lateral view showing coil configuration and stagnation within the contained rupture sac

Figure 4: Post embolization, lateral projection of left ICA angiogram showing final embolization outcome with no filling in the aneurysm sac presumed to exert mass effect on the oculomotor nerve