Abstract E-025 Figure 1 (a) Pre-treatment angiogram showing 8 mm aneurysm, (b) virtual deployment of 2.75×12 mm Pipeline FD, (c) placement of the same FD size across the aneurysm neck with the vessel opacified.

Conclusion Our early experience with the computational modeling system suggests that the technology can potentially accurately predict FD behavior and facilitate the selection of the optimal FD size for a vessel. The technology has great potential to reduce technical complications during FD treatment and improve treatment outcomes.

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E-026 ENDOVASCULAR TREATMENT OF PERICALLOSAL ARTERY ANEURYSMS: SINGLE CENTER EXPERIENCE WITH EARLY FOLLOW UP

M Sattur*, Y Li, E Almallouhi, J Lena, A Spiotta. *Medical University of South Carolina, Charleston, SC*

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Traditionally, microsurgical clipping has been the mainstay of treatment for pericallosal artery aneurysms (PAAs). However, this has changed in recent years with advancements in endovascular surgical techniques. We conducted a retrospective cohort study of pericallosal artery aneurysms that underwent endovascular treatment with coiling and flow diversion at our institution. 33 patients with 34 aneurysms were included (25 aneurysms ruptured, 9 unruptured or recurrent). Of the ruptured group, 22 were coiled (88%) and rest treated with flow diversion. Initial angiographic follow up rate was 72% at median of 159 days. Overall recurrence rate was 40% (10/25) at median of 376 days, all among coiled aneurysms. 6 recurrent aneurysms were retreated with further coiling (2) and flow diversion (4). Of the unruptured/recurrent group, 5 were coiled (55%) and remainder treated with flow diversion. Initial angiographic follow up rate was 100% at median of 267

days. Recurrence rate was 22% (2/9), both in coiled aneurysms. Overall, 27 aneurysms were treated with coiling, 9 with flow diversion and 3 with 'partial' flow diversion. All aneurysms treated with pipeline flow diversion achieved 100% occlusion. No re-rupture or new rupture was noted in our series. Good clinical outcome (modified Rankin scale, mRS 0–2) was seen in 79% of patients. Our study demonstrates that endovascular coiling for PAAs is associated with a definite rate of recurrence, which has to be monitored with timely angiography. We also demonstrate the excellent effectiveness of flow diversion for PAAs with either presentation.

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E-027 'DONUT' ANEURYSM OF THE ANTERIOR CEREBRAL ARTERY: A RARE VASCULAR PHENOMENON

¹S Strasser, ¹L Miskolczi*, ¹C Azaret, ¹C Ionita, ²T Lara, ¹M Lesser. ¹Holy Cross Hospital, Ft Lauderdale, FL; ²Fort Lauderdale Eye Institute, Ft. Lauderdale, FL

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Introduction Intracranial aneurysms with a 'donut-shaped' appearance are believed to be the result of laminar flow within large or giant aneurysms leading to central stagnation, intraluminal thrombosis and eventual 'donut' shaped configuration. We present a patient who experienced SAH due to ruptured 'donut' aneurysm focusing on her unique anatomy and repair.

Materials and methods A 55 year old woman presented to the ED after developing a severe headache. CT revealed left-sided SAH with the epicenter in the region of the left carotid terminus. Subsequently she was further evaluated with CTA, and catheter angiogram. Treatment with platinum coils was staged. An initial dome protection at the proposed bleeding site allowed us to further evaluate the anatomy and flow dynamics with further 2D and 3D angiograms, including a carotid cross-compression angiogram. Subsequent treatment options were flow diversion, surgical clipping and coil embolization without or with stent protection. A patent anterior communicating artery allowed us to simply coil the aneurysm resulting