Methods From 2017, 161 patients underwent CAS with NIRS-IVUS assessment were included. NIRS assessments are performed before and after CAS, measure lipid core burden index (LCBI), maximum LCBI (maxLCBI), etc. from NIRS-IVUS, and measure plaque signal ratio (T1W-SIR) from preoperative MRI. The effect of DLM stent on embolism compared with standard closed stent was investigated.

Results Although there was no difference in preoperative LCBI values between the two groups, postoperative DWI positive rate was significantly lower in the DLM stent group (n = 28) than in the closed stent group (n = 133) (p = 0.001), especially in the lipid core plaque (maxLCBI>504; p < 0.001). In addition, Logistic regression analysis indicates high lipid core plaque and non-DLM stent use are related to DWI positive embolism (p < 0.001, =0.003, respectively).

Conclusion NIRS-IVUS was able to diagnose CAS high-risk lipid core plaques as well as the findings in coronary artery lesions. DLM stents could be a therapeutic option for high-risk lipid core plaques.


E-221 MOST RUPTURED ANEURYSMS ARE SMALL WITH LOW RUPTURE RISK SCORES

E-220 COMPARING TREATMENT OUTCOMES OF VARIOUS INTRACRANIAL BIFURCATION ANEURYSMS LOCATIONS USING WOVEN ENDOBRIDGE (WEB) DEVICE

Background The Woven EndoBridge (WEB) device has FDA approval for treatment of wide-necked intracranial bifurcation aneurysms. While the WEB device has proven to result in adequate occlusion in bifurcation aneurysms overall, its utility in the individual bifurcation locations has only been evaluated separately in few case series which were limited by small sample sizes. The present study aims to compare angiographic and clinical outcomes after treatment of bifurcation aneurysms at various locations, including Acom, ACA bifurcation distal to Acom, basilar tip, ICA bifurcation, and MCA bifurcation using the WEB device.

Methods A retrospective cohort analysis was conducted at 22 academic institutions worldwide to compare treatment outcomes of patients with intracranial bifurcation aneurysms using the WEB devices. Data includes patient and aneurysm characteristics, procedural details, angiographic and functional outcomes, and complications.

Results A total of 572 aneurysms were included. MCA (36%), Acom (35.7%), and basilar tip (18.9%) aneurysms were most common. The rate of adequate aneurysm occlusion was significantly higher for basilar tip (91.6%) and ICA bifurcation (96.6%) aneurysms and lower for ACA bifurcation (71.4%) and Acom (80.6%) aneurysms (p = 0.04).

Conclusion To our knowledge, this is the most extensive study to date that compares the treatment of different intracranial bifurcation aneurysms using the WEB device. Basilar tip and ICA bifurcation aneurysms showed significantly higher rates of aneurysms occlusion compared to other locations. These findings are crucial to guide management of bifurcation aneurysms as it shows that MCA bifurcation and Acom aneurysms might not be ideal candidates for WEB device and could benefit from other modalities of treatment, including microsurgical clipping. Further studies comparing those modalities are needed.

Disclosures N. Adeeb: None.

E-222 HOW FAR IS TOO FAR IN STROKE THROMBECTOMY? FROM XL TO XS VESSEL OCCLUSIONS WITH RADIALY ADJUSTABLE STENT-RETREIVERS – TIGERTRIEVER XL AND TIGERTRIEVER 13

Background A New class of Radially adjustable Stent-retreivers, Tigertriever XL and Tigertriever 13 1, 2 (Rapid Medical, Yqe- neam, Israel) are respectively CE-Marked for large, and distal, medium vessel occlusions (DMVO). Despite no randomized data support distal vessels recanalization yet, we report our initial experience with the Tigertriever 13 in DMVO3 and illustrate it with a case where Tigertriever XL and 13 were needed to obtain a complete recanalization.