Methods Of 757 MCA aneurysm between December 2017 and October 2021, 54 M1 segment aneurysms were treated with EVT, and these aneurysms were designated M1 hilltop aneurysms. Clinical and radiographic data, including aneurysm characteristics, endovascular techniques, angiographic outcome, procedure-related complications and clinical outcomes at the time of the last follow-up, were collected and reviewed retrospectively.
Results Treatments were successful in all 54 cases; 21 cases were treated with coiling and 33 cases with stent-assist coiling (SAC). Of the 54 cases, 50 (92.6%) cases were identified as wide-neck aneurysms. The neck of aneurysm incorporating branch vessel was found in 49 (90.7%) cases. Immediate post-procedural angiogram showed favorable occlusion in 32 (59.3%), incomplete occlusion in 22 (40.7%). There were 4 (7.4%) procedures-related complications including thromboembolism and internal carotid artery dissection, but there were no cases of permanent neurological impairment. Recurrence was significantly realted to aneurysmal neck (OR 3.9, 95% CI 1.2 to 12.9, p=0.025).
Conclusion EVT for M1 hilltop aneurysms appears to be safe and efficacious, with low mid-term recurrence rate. However, long-term and large cohort study will be needed.
Disclosure of Interest Nothing to disclose

P058/65 TWO-YEAR FOLLOW-UP OF DISTAL UNRUPTURED INTRACRANIAL ANEURYSMS TREATED WITH A SURFACE-MODIFIED FLOW DIVERTER UNDER PRASUGREL MONOTHERAPY

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Introduction A new generation of modified surface FDs and monotherapy using new antiplatelets may reduce both ischemic and hemorrhagic complications during the treatment of intracranial aneurysms. Long-term outcomes of distal IA treated with FD under antiplatelet monotherapy are unknown.
Aim of Study The aim of the present pilot study was to assess the two-year follow-up safety and efficacy of p48 MW HPC in the treatment of unruptured distal IA under the use of prasugrel monotherapy during 6 months following by aspirin until 24 months.
Methods This was a single-center, prospective, pivotal, open, single-arm study. The primary (safety) endpoint was the absence of any new neurological symptoms after treatment until the 24-month follow-up. The primary (efficacy) endpoint was the incidence of complete aneurysm occlusion 24 months after treatment. The secondary (efficacy) endpoints were incidence of aneurysm dome reduction $\geq$ 50%, and incidence of aneurysm dome reduction < 50%, 24 months after treatment.
Results Twenty-one patients harboring 27 distal aneurysms of the anterior circulation were included. No patient had symptoms from treatment until 24-month follow-up. Complete aneurysm occlusion occurred in 20 (74%) of 27 aneurysms at the 24-month follow-up. Two aneurysms (7.4%) had a dome reduction $\geq$ 50%, 2 aneurysms (7.4%) had a dome reduction < 50%, and 3 aneurysms (11.1%) remained unchanged.
Conclusion In this pilot trial, the treatment of distal, unruptured intracranial aneurysms with a stent under monotherapy with prasugrel appeared to be safe and effective.
Disclosure of Interest Nothing to disclose

P059/78 ENDOTHELIZATION OF SURFACE MODIFIED FLOW-DIVERTERS (FDS): DOES SURFACE MODIFICATION DELAY HEALING?

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Introduction Flow diversion for aneurysm treatment has been widely used. Biomimetic surface modifications such as the phosphorylcholine polymer (Shield surface modification) aim to reduce thrombogenicity of these devices, and potentially the need for dual-antiplatelet therapy. How this modification affects endothelial growth remains unclear.
Aim of Study To investigate in-vivo the longitudinal healing of Pipeline Shield, Vantage Shield, and bare metal Pipeline Flex devices in vivo with the hypothesis that there would be no differences between modified and bare devices.
Methods The common carotid arteries of ten rabbits were implanted with the 3 FD-stents mentioned. All devices were imaged with high-frequency optical coherence tomography (HF-OCT) and angiography at implant,5,10,15 and 30 days to evaluate placement and tissue growth. At 30 days, the devices were explanted, and endothelial growth was assessed with scanning electron microscopy (SEM) at 5 locations along their length using a semi-quantitative score from 0 (no tissue growth) to 5 (complete coverage). An automated method was used to measure the average tissue growth thickness (ATGT) along the device based on the HF-OCT images.
Results At 5 days, no statistical difference of ATGT between devices was shown, with the Vantage having a slightly higher ATGT. At the remaining timepoints, there was no difference, or trend in ATGT between device types. On SEM, all devices scored at least a 4 or 5 at every location, and no differences were found between median or mean scores.
Conclusion Endothelial coverage is not affected by Shield surface modification nor the Vantage stent design.
Disclosure of Interest CZ, ME, RK: Nothing to disclose
VA, MG :Medtronic

P060/83 OUTCOMES AND SAFETY OF FLOW DIVERTER STENTS FOR CAROTICO-OPHTHALMIC ANEURYSMS

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Introduction Carotid-ophthalmic aneurysms represent 0.3–1% intracranial and 0.9–6.5% ICA aneurysms. Optimal management is currently contentious.
Aim of Study Reviewing outcome and safety of flow divertors stents (FDS) for Carotid-Ophthalmic aneurysms.
Methods Retrospective data between 2015 and 2021 was collected from CRIS/PPM/PACS databases for 64 carotid-