**Abstracts**

**Results** 53 consecutive elective patients with 63 aneurysms located in the anterior (87%), posterior (9%), and extracranial (4%) circulations were included. A total of 65 devices were inserted. Of the anterior circulation aneurysms, 14% had the PVED implanted distal to the circle of Willis. Additional coil embolisation was performed in 20% of the aneurysms and instent balloon angioplasty in 6% (performed to improve device opening and proximal wall apposition). This was considered a technical alteration to previous generation Pipeline Embolisation device (PED) deployment at our institution. All patients were discharged without neurological deficits. One patient developed transient contralateral hand weakness during the immediate post-operative period, which resolved 24 hours post procedure. At 45 days following the procedure, the morbidity and mortality were 0%. Occlusion rates at one month was 40%, at three months 60% and at 6 months 75%.

**Conclusion** The new PVED demonstrates improved device visibility, pushability, ease to reshatch and precise distal opening with overall good performance, safety and encouraging early aneurysm occlusion rates. The implant requires a modified deployment technique for successful opening of the proximal stent and required balloon angioplasty in a small proportion of cases to optimise proximal device opening and wall apposition.

**REFERENCES**


**Disclosures** H. Rice: 1; C; Medtronic, Stryker, LifeHealthcare. 2; C; Medtronic, Stryker, LifeHealthcare. V. Carraro do Nascimento: None. L. de Villiers: 1; C; Medtronic, Stryker, Life-Healthcare. 2; C; Medtronic, Stryker, LifeHealthcare.

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**E-254** EVALUATION OF BRUCH’S MEMBRANE IN THE MANAGEMENT OF IDIOPATHIC INTRACRANIAL HYPERTENSION

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Venous sinus stenting (VSS) for idiopathic intracranial hypertension (IIH) has been demonstrated to achieve significant symptom improvement while harboring a low peri-interventional morbidity profile. Comprehensive neuro-ophthalmological monitoring represents a cornerstone of disease monitoring. Bruch’s membrane is the innermost membrane of the choroid of the eye. It is assessed by optical coherence tomography (OCT) and is currently used as a tool to help manage patients suffering from glaucoma. The value of assessing Bruch’s membrane in IIH requires further exploration. Twenty-one patients with IIH who underwent VSS between 04/2018 and 04/2022 were retrospectively reviewed. Clinical and radiological were analyzed. Neuro-ophthalmological data included visual acuity, visual fields, fundoscopy categorized via Frisén scale, and OCT obtained both Bruch’s membrane. Bruch’s membrane and RNFL thickness were recorded pre-VSS as a baseline and post VSS at post-operative days 1, 30, 90, 180. After TSST, manometry showed a significant reduction of maximum transverse sinus pressures and trans-stenotic gradient pressures. Chronic headaches, visual disturbance, and pulsatile tinnitus improved significantly. The OCT calculated RNFL thickness significantly decreased in all patients. Stratification according to a minimal—low degree (Frisén 1–2) and moderate-marked degree (Frisén 3–4) papilledema demonstrated a significant reduction of RNFL thickness in both groups. Bruch’s membrane analysis correlated with OCT findings and clinical follow-up. Venous sinus stenting provides favorable clinical and neuro-ophthalmological outcomes. This study demonstrates that neuro-ophthalmological testing augmented with OCT and Bruch’s membrane evaluation provides objective data that can be used as a biomarker for treatment success for managing patients with different extents of papilledema and may inform patient management.

**Disclosures** O. Goren: None.

**E-255** CATHETER BLOOD VESSEL RATIO FOR MIDDLE CEREBRAL ARTERY OCCLUSIONS REQUIRING MECHANICAL THROMBECTOMY: A PROPENSITY ADJUSTED ANALYSIS


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**Background** Mechanical thrombectomy is considered a gold standard procedure for the management of large vessel occlusions in the acute stroke setting. There are currently no guidelines present to select optimal catheter diameter, and such decisions are based on surgeon preference and experience. In this study, we seek to determine whether catheter-blood vessel-ratio (CVR) is predictive of reperfusion and patient outcomes including post-procedure intracerebral hemorrhage (ICH) for patients undergoing mechanical thrombectomy.

**Methods** A retrospective analysis was performed of all patients with a proximal middle cerebral artery (M1) occlusion at a large comprehensive stroke center who underwent a mechanical thrombectomy from 1/1/2020 to 6/30/2021. Study included patients with an available pre-intervention axial CTA in which cross-sectional diameter was measured of the occluded M1 proximally. An aspiration catheter outside diameter and vessel cross-sectional diameter ratio (CVR) was calculated. Patients were grouped and compared based on a CVR threshold of 0.9. Additional data extracted for analysis included: demographics, occlusion characteristics, intraoperative and post-operative management, and in-hospital and discharge outcomes. Univariate statistics used Welch’s two-sample t-test for continuous data and chi-squared test for frequency-based variables. Multivariate analysis used multivariate linear and Firth’s logistic regression. A propensity-score adjustment was used consisting of age, gender, admission NIHSS, ASPECT score, prior anti-coagulation, or anti-platelet use, TPA usage, and systolic blood pressure.

**Results** During the 19-month study period, 60 patients met inclusion criteria with 25 patients (42%) found to have CVR >0.9 (vs 35 (58%) with CVR < 0.9). There was no difference between cohorts in demographics or patient presentation on univariate analysis. Of the 25 patients with a CVR >0.9, 8% (N=2) had >2 passes compared to 20% (N=7 of 35) in the CVR < 0.9 cohort (p=0.22). Puncture to revascularization time, admission NIHSS, and discharge NIHSS