improve technical feasibility of procedures, reduce procedural times, and minimize procedural costs.

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E-144 TREATMENT OF WIDE-NECKED BIFURCATION ANEURYSMS WITH THE ECLIPS DEVICE: FIVE YEAR EXPERIENCE OF A SINGLE CENTER

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Background and Purpose The endovascular clip system (eCLIPS) is a novel device with both neck bridging and flow diversion properties that make it suitable for the treatment of wide-necked bifurcation aneurysms. We aim to describe the clinical and radiological outcomes of the eCLIPS device, including the first-in-man use of the latest version of the device.

Materials and Methods This is a retrospective case series on all the wide-necked bifurcation aneurysms treated with the eCLIPS device in our center. The immediate and latest radiological and clinical outcomes were assessed.

Results The device was successfully implanted in 12 out of 13 patients. After a median follow-up period of 19 months (Range: 3 months-64 months), all patients with available data (11/12) had a good radiologic outcome (Modified Raymond-Young Classification scores of 1 or 2). Two patients (18.1%) underwent retreatment with simple coiling through the device. One of these had a subarachnoid hemorrhage prior to retreatment. There were no major complications (death or permanent neurologic deficits) associated with the use of the device.

Conclusion Our series demonstrates occlusion rates that are similar to standard stent-assisted coiling and intrasaccular flow diversion for wide-necked bifurcation aneurysms. Larger registry-based studies are necessary to support our findings.

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E-145 COLLATERAL PATTERNS IN LARGE VESSEL OCCLUSION STROKE AND OUTCOMES AFTER ENDOVASCULAR THROMBECTOMY

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Introduction Endovascular thrombectomy (EVT) has revolutionized large vessel occlusion (LVO) stroke care. However, treatment decisions and prognostication are challenging when advanced imaging is unavailable. We sought to determine the relationship of presentation simple CTA collateral patterns and outcomes after EVT.

Methods We identified patients with anterior circulation LVO who underwent guideline-based EVT from 2019 to 2020 at a single referral center. Inclusion criteria were available CTA for retrospective review and 90-day modified Rankin Scale (mRS) score. Arterial phase CTA collaterals at presentation were categorized as malignant, other, or symmetric.

Results Among 74 patients, the median age was 75 (IQR 58-82), and 49% were female. Collaterals were symmetric (36%), malignant (24%), or other (39%). Comparing collateral patterns, there were no differences in demographics, risk factors, time from last known well, thrombolysis treatment, TICI 2b-3 reperfusion, or intracerebral hemorrhage. Median NIHSS was 18 (14-23) for malignant, 19 (12-22) for other, and 11 (8-18) for symmetric (p=0.02). Intracranial ICA occlusions were present in 28% of malignant, 3% of other, and 11% of symmetric (p=0.04). Ninety-day mRS ≤2 was achieved in 17% of malignant, 38% of other, and 67% of symmetric. Collateral pattern was an independent determinant of 90-day mRS ≤2 (aOR=6.62, 95%CI=2.24,19.53; p=0.001) in a multivariable model controlling for age, NIHSS, baseline mRS ≥3, thrombolysis, occlusion location, and TICI 2b-3 reperfusion.

Conclusions Collateral pattern is a robust determinant of 90-day outcomes after EVT. It may help guide EVT decisions in the delayed window, especially when there are delays to treatment such as those related to patient transfer. Further prospective studies are needed to evaluate the role of collateral pattern in treatment decisions and prognostication.


E-146 RETROSPECTIVE ANALYSIS OF RADIOGRAPHIC EXPOSURE AND EFFICACY FOR THREE FLOW-DIVERTER STENTS

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Background Flow-diverter stents (FDSs) are one method for the embolization of cerebral aneurysms. Our study compared the performance of three flow-diverter stents.