P063/120 A GIANT STENT FOR GIANT ANEURYSMS – THE ACCERO-REX-STENT

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Introduction Until now, the treatment of giant fusiform aneurysms of the posterior circulation has been a disease that is difficult or impossible to treat, mostly due to the lack of availability of a large-format stent. In this multicentre study, we report on the world's first five clinical deployments of the Accero-Rex-Stents (Acandis) for the treatment of fusiform giant aneurysms.
Aim of Study We investigated the clinical performance of the Accero-Rex-Stents in the treatment of fusiform giant aneurysms of the posterior circulation.
Methods The Accero-Rex-Stents are self-expanding, braided, fully radiopaque Nitinol stents. They are available in three different sizes (diameter 7 – 10 mm, length 30 – 60 mm) and intended for implantation in vessels with diameters of 5.5 – 10 mm. The stents were implanted in aneurysms of the posterior circulation.
Results Five patients with large fusiform aneurysms of the posterior circulation were treated endovascularly using the Accero-Rex-Stents. There were no major technical complications peri- and post-intervention and the implanted stents showed proper contrast perfusion in all follow-up examinations. A significant remodeling and reduction in the size of the stent-covered aneurysms was already seen in the short-term post-interventional course, no major clinical complications occurred.
Conclusion The Accero-Rex-Stents were used safely in five patients for the treatment of fusiform aneurysms of the posterior circulation without any technical complications. The treatment options of giant fusiform aneurysms are extended by the Accero-Rex-Stents.
Disclosure of Interest Nothing to disclose

P064/122 TREATMENT OF INTRACRANIAL ANEURYSMS WITH FLOW DIVERSION IN A REAL-WORLD SCENARIO – 10-YEAR SINGLE CENTER COHORT

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Introduction Flow diverters (FDs) have dramatically altered the treatment of intracranial aneurysms. Several literature studies have demonstrated the safety and effectiveness of individual devices. However, in clinical practice, different FDs are used, for different aneurysms, ruptured and unruptured.
Aim of Study To assess the safety, long term angiographic and clinical outcomes in a real-world scenario.
Methods We retrospectively analyzed data from all consecutive patients with intracranial aneurysms treated with FDs at our tertiary center between January 2010 and December 2019. Clinical presentations, intra- and perioperative complications, and clinical and angiographic outcomes were recorded, with long-term follow-up. Logistic regression analysis was performed to evaluate for possible variables associated with aneurysm occlusion, and early ischemic stroke after FD.
Results A total 169 patients with 202 aneurysms were included. Seventeen aneurysms (8.4%) were ruptured. Technical success was achieved in 97.5% of cases. Aneurysm occlusion rates were 52.0% (64/123), 70.4% (88/125), and 81.5% (101/124) at 6 ,12 and 24-month follow-up, respectively. Intraprocedural complications occurred in 4.7% of patients, and postprocedural complications in 20.1%. The most frequent complication was ischemic stroke (14.9%), which was independently associated with older age and higher number of devices used.
Conclusion Our series suggests that treatment with FD is feasible in a wide spectrum of cases, including aneurysms in different locations, sizes and morphology, ruptured and non-ruptured, reflecting a real-world scenario. Although available devices may differ, they seem to demonstrate comparable and adequate safety and effectiveness.
Disclosure of Interest Nothing to disclose

P065/123 THE CHANGE OF CLOPIDOGREL EFFECT AFTER STENT-ASSISTED COIL EMBOLIZATION DESPITE AN ACCEPTABLE RANGE OF RESPONSE BEFORE PROCEDURE

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Introduction It is generally believed that antiplatelet effect, especially clopidogrel, reaches and maintain a therapeutic range and plateau within 5–7 days. However, the consistence of clopidogrel effect after stent-assisted coil embolization is unclear.
Aim of Study The purpose of this study was to evaluate follow-up P2Y12 reaction unit (PRU) in the patients who underwent stent-assisted coil embolization.
Methods The Patients were administered a dual antiplatelet (100mg of aspirin and 75mg of clopidogrel) for 5 days prior to coil embolization. The follow-up PRU was evaluated between 2 and 4 weeks after stent-assisted coil embolization in the outpatient clinic. To evaluate the predictability of significant variables for a follow-up PRU value less than 80, the receiver-operating characteristic (ROC) curve method was employed. The optimal cutoff value was determined using the Youden index.
Results A total of 124 patients with 131 aneurysms were included in this study. The median PRU before coil embolization was 155 (IQR 124–181), and the median follow-up PRU after coil embolization was 142 (IQR 92–179). A total of 29 patients (23.4%) had a follow-up PRU value less than 80. The optimal cut-off value of pre-procedural PRU to predict a follow-up PRU value less than 80 was 124.
Conclusion The PRU level after stent-assisted coil embolization can decrease to a hyper-response level despite an acceptable range of the PRU Before Procedure. The significant predictor

of hyper-response was the pre-procedural PRU level. The optimal cut-off value of pre-procedural PRU to predict a follow-up PRU value less than 80 was 124.
Disclosure of Interest Nothing to disclose

P066/124 INTEROBSERVER AGREEMENT AMONG ENDOVASCULAR NEUROSURGEONS FOR UNRUPTURED INTRACRANIAL ANEURYSMSUSING A NEW GRADE OF RECOMMANDATION SYSTEM

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Introduction Patients who have unruptured intracranial aneurysms (UIAs) might receive different clinical advice from different clinicians. This can be bewildering and distressing for them, as their condition could be fatal.
Aim of Study To analyse the levels of interobserver agreement in clinical decisions among three endovascular neurosurgeons at the same hospital using a newly developed grade of recommendation (GOR) system.
Methods We selected 161 consecutive patients with 202 UIAs for this study. The GOR system consists of six grades, which indicate various clinicians' recommendations, including treatment or no-treatment. The three observers reviewed medical records and digital subtraction angiography, then marked corresponding GORs for the case aneurysms. Interobserver agreement was analysed with Fleiss' kappa values.
Results The overall Fleiss' kappa was 0.52 among the three observers, indicating a moderate level of interobserver agreement. It was relatively high in grade 1 and grade 5. It was the lowest in grade 3. When GORs were classified as treatment, middle and no-treatment groups, the overall kappa value was 0.84, indicating almost perfect.
Conclusion The level of interobserver agreement was very high in terms of treatment versus no-treatment, but moderate regarding the strength of the recommendation. Further studies are needed to clarify the detailed reasons for the similarities and differences of the clinicians' recommendations.
Disclosure of Interest Nothing to disclose

P067/132 CEREBRAL VASOSPASM TREATMENT USING COMANECI DEVICE – REGISTRY STUDY

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Introduction Subarachnoid haemorrhage (SAH) can result in cerebral vasospasms and delayed cerebral ischemia, which contribute significantly to morbidity and mortality. The effectiveness of endovascular treatment for this condition is still a subject of debate. However, the adjustable neck-bridging device Comaneci (Rapid Medical, Yokneam, Israel) may offer a safe and effective alternative to balloon angioplasty.
Aim of Study The Comaneci Registry Trial is the first multicentre registry designed to evaluate the clinical and radiologic safety and efficacy of Comaneci in angioplasty of cerebral vasospasm in a standardized manner in patients with severe cerebral vasospasm after SAH.
Methods All patients with severe vasospasm (>50%) in digital subtraction angiography (DSA) after aneurysmatic SAH treated with the Comaneci device as first-line therapy are included and evaluated through an angiographic vessel-by-vessel analysis using a 4-level scale as primary endpoint. All vessel-segments in anterior and posterior circulation up to M3-,A3- and P2-level are eligible for angioplasty with Comaneci. Clinical outcome is assessed with National Institutes of Health Stroke Scale (NIHSS) and modified Rankin Scale mRS.
Results Although the study is still ongoing, the preliminary findings have demonstrated the safety and effectiveness of the treatment for vasospasm with Comaneci as a first-line angioplasty device.
Conclusion The Comaneci device has the potential to serve as a first-line device for providing therapeutic benefit to patients with SAH and vasospasm. However, future prospective trials are required.
Disclosure of Interest Nothing to disclose

P068/133 THE BENEFITS IF FLOW DIVERSION VERSUS COILING IN SMALL SACCULAR ANEURISMS OF ANTERIOR CIRCULATION: A MATCHED OBSERVATIONAL STUDY

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Introduction Endosaccular coiling (EC) remains a gold standard treatment for small saccular aneurysms of anterior circulation (AC), however, flow diversion (FD) offers a reasonable alternative. Currently, the benefits of FD in such lesions are not well-established.
Aim of Study To compare safety and efficacy of FD versus EC in small saccular AC aneurysms, amenable to both methods.
Methods In 2016–2019, 344 consecutive cases (FD n=154, EC n=190) were enrolled. All lesions were saccular, sized ≤14 mm, located at intradural ICA or A1/M1, and untreated. Median aneurysm size was 6.6 mm (90% <10 mm), median neck diameter – 3.7 mm (72% wide-necked). Follow-up DSA available for 94.2% cases at median 9 months.
Results In raw cohorts FD vs EC demonstrated Raymond-Roy (RR)-1 occlusion 76.4% vs 53.2% (p<0.0001), RR1+2 – 80.6% vs 69.7% (p=0.033), retreatment – 2.6% vs 15.4% (p<0.0001), all-cause adverse events 12.6% vs 23.6% (p=0.02). In matched cohorts (67 cases each, PS difference ≤0.1 probit SD all covariates) FD vs EC exhibited RR1 occlusion – 80.3% vs 49.2% (p<0.0002), RR1+2 – 80.3% vs 63.1% (p=0.034), all-cause adverse events 17.9 vs 34.3% (p=0.033), retreatment – equal 1.5%. Rates of neurological complications, morbidity, and mortality were similar between groups in both raw and matched cohorts.
Conclusion In both raw and matched cohorts, FD had significantly higher rate of target aneurysm obliteration and lower rate of all-cause adverse events, with similar rates of neurological complications, morbidity, and mortality.
Disclosure of Interest No conflict of interests