Haemorrhagic

1.1. Aneurysms

O18 EVOLVE FLOW DIVERTER SYSTEM PROSPECTIVE STUDY OF THE SPANISH SOCIETY OF NEURORADIOLOGY (GENISE). 1YEAR FOLLOW UP RESULTS

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Introduction The Surpass Evolve Flow Diverter (FD) System is indicated for use for the treatment of saccular or fusiform intracranial aneurysms arising from a parent vessel with a diameter ≥2.0mm and ≤5.0mm.
Aim of Study The Spanish Society of Neuroradiology (GENI) aimed to evaluate safety and efficacy of the Stryker Evolve FD up to 12 months after implant in a real world setting.
Methods GENISE is a single arm, prospective, multicenter, core-lab reviewed study. From February 2021 to June 2023, consecutive patients with an unruptured cerebral aneurysm treated with Evolve FD were enrolled in 18 spanish centers after local Ethical Committee approval.
Results 176 consecutive patients with a total amount of 222 aneurysms were included. The aneurysms were located in the anterior (91.9%) or posterior (8.1%) circulation. A total amount of 188 devices were deployed. The deployment success rate was 100%. In 60 (34.1%) cases post processing was performed to optimize device wall apposition using subsequently ballon remodelling or laser cut stent. Occlusion rates at 3-6 months were 67.8%, and at 12 months 85.4%. At 6 months morbidity and mortality were 6,8% and 1,7%, respectively and 12 cases (6.9%) demonstrated >30% in-stent stenosis.
Conclusion This study demonstrates Evolve FD device deployed in unruptured intracranial aneurysm has an overall satisfactory device performance, safety and effectiveness
Disclosure of Interest no.

O19 TREATMENT OF UNRUPTURED DISTAL ANTERIOR CEREBRAL ARTERY ANEURYSMS WITH FLOW-DIVERTER STENTS: A LARGE MULTI-CENTER EXPERIENCE

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Introduction Evidence about the safety and the efficacy of flow diversion for distal anterior cerebral artery (DACAs) - beyond the anterior communicating artery (AComA)- aneurysms is very poor.
Aim of Study We present the largest multicentric analysis evaluating the outcomes of flow diverters in unruptured DACAs aneurysm treatment.
Methods Databases from 37 centers were retrospectively reviewed for unruptured DACAs aneurysms treated with flow diverters. Demographics, clinical presentation, radiographic characteristics, procedural complications, and outcomes were assessed. The occlusion of the aneurysm was assessed using the O'Kelly-Marotta (OKM) scale.
Results A total of 168 patients with an unruptured DACAs aneurysm were treated between January 2018 and December 2022. One hundred twenty-five were women (74.4%) and median age was 61 (IQR 52-67) years. The most common morphology was saccular (88.7%), with a branch involvement in 61,9% of cases. Median vessel diameter was 1.9 mm, and the FD was successfully deployed in 99,4 of cases. 96,4% required a single FD, while in 3,6% of cases 2 FDs were implanted. Median imaging follow-up was 16,5 (IQR 7-24) months. At last follow-up the rate of occlusion (OKM C+D,) was 82.1%. Symptomatic thrombo-embolic or hemorrhagic complications occurred in 5.3%. The rate of retreatment was 1,2%. Mortality 0.6%.
Conclusion Our study findings indicate that flow diverters represent a beneficial treatment option for DACAs aneurysms. Follow-up assessments revealed favorable aneurysm occlusion rates alongside a favorable safety profile.
Disclosure of Interest no.

O20 INTERIM RESULTS FROM PROSPECTIVE POST-MARKET CLINICAL IMPACT TRIAL OF PRESIZE SOFTWARE SIMULATION IN INFORMING FLOW DIVERTING STENT DEPLOYMENT IN ANEURYSM TREATMENT

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Introduction Preoperative simulation of flow-diverting stent (FD) deployment in aneurysm treatment could improve procedural accuracy and efficiency compared with standard planning.
Aim of Study Present interim results (first 50 patients) for first-of-its-kind, multi-centre prospective trial collecting real-world evidence on impact of CE-marked PreSize Neurovascular simulation software (Oxford Heartbeat) on clinical decision-making for FD deployment.
Methods The interventional neuroradiologist (INR) firstly plans each case, deciding device/size to use without PreSize (standard planning), then uses PreSize in real-time. Based on this, INR decides which device to use in procedure (no prescribing).

Data is collected on pre-deployment decision-making and procedure outcomes (devices used, intraoperative manipulations, simulation accuracy against post-deployment imaging).