employees of Circle Cardiovascular Imaging Inc. All other co-authors have nothing to disclose.

O06/60 DIAGNOSIS OF INTRACRANIAL ATHEROSCLEROSIS RELATED LARGE VESSEL OCCLUSION BEFORE ENDOVASCULAR TREATMENT

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Introduction The diagnosis of large vessel occlusion (LVO) with underlying intracranial atherosclerotic disease (ICAD) before endovascular treatment (EVT) continues to be a challenge.

Aim We aimed to analyze baseline clinical-radiological variables associated with ICAD-LVO before EVT.

Methods Retrospective study of consecutive patients with stroke treated with EVT from January-2020 to April-2022. We included anterior intracranial LVO (ICA, MCA-M1,2) and analyzed baseline clinico-radiological variables associated with ICAD-LVO. We evaluated the diagnostic value of a multivariate regression model and a weighted scale to diagnose ICAD-LVO before EVT. ICAD-LVO was defined as the presence of angiographic residual stenosis or a trend to re-occlusion during EVT.

Results Of 338 patients included, 28 patients (8.3%) presented with ICAD-LVO. After adjusting for confounders, absence of atrial fibrillation (OR 10.19, 95%CI 1.12–86.6; p=0.033), lower hypoperfusion intensity ratio (HIR [Tmax>10s/Tmax>6s ratio], OR 0.02, 95%CI 0.00–0.41; p=0.013), presence of symptomatic intracranial artery calcification (IAC, OR 6.94, 95%CI 1.69–28.45, p=0.007), presence of a more proximal occlusion (ICA, MCA-M1: OR 3.16, 95%CI 1.03–9.67; p=0.044) and smoking (OR 3.26, 95%CI 1.21–8.75; p=0.019) were associated with ICAD-LVO. A weighted scale based on the covariates such as HIR (3points), absence of AF (2p), IAC (1p), occlusion location (1p) and smoking (1p) predicted ICAD-LVO with good accuracy (AUC=0.88, 95%CI 0.83–0.94; p<0.001).

Conclusion A combination of clinical and radiological variables available before EVT can accurately predict the presence of an ICAD-LVO. The ICAD-Scale could be useful to perform a rapid assessment of underlying etiology and suggest specific pathophysiology-based measures (adjunctive pharmacological treatment, angioplasty and/or intracranial stenting).

Disclosure of Interest Dr Molina reported receiving personal fees from AstraZeneca for consultant services outside the submitted work. Dr Tomasello reported receiving personal fees from Anaconda Biomed, Balt, Medtronic, Perflow, and Stryker outside the submitted work. Dr Ribo reported receiving personal fees from Anaconda Biomed, AptaTargets, Cerenovus, Medtronic, Methinks, Philips, Sanofi, Stryker, Balt, and Rapid AI outside the submitted work; he has a modest ownership of NoraHealth. The other authors report no conflicts. The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

2.3 ISCHEMIC – Treatment

O07/69 PROCEDURAL, CLINICAL AND SAFETY OUTCOMES IN ACUTE ISCHEMIC STROKE STRATIFIED BY OPERATOR TECHNIQUES AND CLOT LOCATION – INSIGHTS FROM THE ASSIST REGISTRY

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Introduction The ASSIST registry is a prospective, global registry that assessed clinical and procedural outcomes associated with various operator techniques for mechanical thrombectomy (MT) in acute ischemic stroke (AIS) patients with large vessel occlusion (LVO) where Stryker Neurovascular devices were used for the first pass.

Aim of Study An analysis of the registry data aims to determine if procedural outcomes, including first-pass effectiveness, safety, and clinical outcomes, vary by clot location among the three MT techniques.

Methods ASSIST patients were grouped in three cohorts: Stent Retriever (SR) Classic [SR + Balloon Guide Catheter (BGC)], SR Combination [SR + Aspiration Catheter (AC) ± Pump + BCG or Long Sheath (LS)] and Direct Aspiration [AC ± Pump + BGC or LS]. The procedural endpoint of eTICI 2c or greater on the first pass was stratified by clot location (MCA-M1, MCA-M2 and ICA). Similar analyses were performed on the primary clinical endpoint (mRS 0–2 at Day 90) and other secondary and safety endpoints.

Results A total of 1492 patients met the ASSIST eligibility criteria. First pass eTICI scores across the three different techniques, stratified by clot location, will be presented. Stratification by clot location will be also provided for other procedural, clinical and safety endpoints.

Conclusion ASSIST provides insights into the effectiveness and safety of different MT techniques as stratified by clot location to improve reperfusion rates, functional outcomes and quality of life for AIS patients worldwide.

ClinicalTrials gov ID: NCT03845491

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