intra-arterial nimodipine in treating vasospasm during mechanical thrombectomy.
Methods Clinical and radiological records of AIS patients who underwent mechanical thrombectomy together with intra-arterial nimodipine were retrospectively analyzed. Mean arterial blood pressure (MABP) data were collected before, immediately after, and 10 minutes after nimodipine administration.
Results 75 patients receiving intra-arterial nimodipine for vasospasm during mechanical thrombectomy were included. Mean MABP after nimodipine injection was 81.79 ± 0.49 mmHg. Nimodipine effectively resolved arterial vasospasm in 76.3% of cases, aiding diagnosis of iatrogenic dissection or residual clot in other cases. TICI score ≥ 2b was achieved in 94.7% of cases, and 39 out of 72 patients (54%) had mRS ≤2. Comparing the ASPECT scores of the admission with that at 24 hours no shift was found in 77.9% of cases, shift of 1 point in 16.2% of cases and shift > 1 point in 5.9% of cases.
Conclusion Preventive administration of vasoactive amines and careful monitoring of MABP maintain recommended blood pressure during nimodipine administration in endovascular treatment for AIS. Nimodipine is useful in distinguishing vasospasm from iatrogenic dissection or residual clot.
Disclosure of Interest Paolo Machi is consultant for Striker and Medtronic.

035/335 FACTORS ASSOCIATED WITH SUCCESSFUL RECANALIZATION IN PATIENTS WITH ACUTE ISCHEMIC STROKE TREATED WITH ENDOVASCULAR THROMBECTOMY – A NATIONWIDE REGISTER-BASED OBSERVATIONAL STUDY

[1,2]Johan Wasselius*, [1,2]Emma Hall, [1,2]Birgitta Ramgren, [3,4]Tommy Andersson, [1,2]Teresa Ullberg. *[1]Skåne University Hospital, Medical Imaging and Physiology, Lund, Sweden; [2]Lund University, Clinical sciences Lund, Lund, Sweden; [3]Karolinska Institute, Department of Clinical Neuroscience, Solna, Sweden; [4]Karolinska sjukhuset solna, Department of Neuroradiology, Solna, Sweden*

10.1136/jnis-2023-ESMINT.35

Introduction Technical success in endovascular thrombectomy (EVT) is one of the most important factors for favorable functional outcome in acute ischemic stroke (AIS). Several studies have addressed technical aspects of EVT, but it is not well known how procedural factors contribute to technical success in routine healthcare, especially factors that are not evaluated in trials, such as the time of the day or the day of the week.
Aim of Study The aim of this study was to explore factors associated with technically successful EVT on nationwide scale.
Methods We did an observational register-based study assessing factors associated with technical success on EVT in Sweden. The association between baseline and treatment variables and successful recanalization were explored using x^2 test and univariate logistic regression. A multivariable logistic regression with a backwards conditional approach was used to define predictors of successful recanalization.
Results The study included 3211 patients treated with EVT for anterior circulation AIS during 2015–2020. Successful recanalization was achieved in 83.1% (2667) with a gradual improvement over the period.

Key findins include:

- General anesthesia increases the technical success-rate from 81 (sedation) to 87%.
- The success-rate is similar for tandem-lesions and for isolated intracranial occlusions.
- The use of Balloon Guide Catheters increases the technical success-rate from 81 to 86%.
- There is no significant drop in success-rate for low volume operators or centers.
- The previous success-rate of the operator is the most discriminating factor for success.

Conclusion This study explore procedural factors associated with technically successful EVT on nationwide scale.
Disclosure of Interest JW received funding from the Crafoord Foundation (#20200548) The Swedish Government (YF-ALF #43435), Region of Skåne research grant (#47455), Skåne university Hospital research grants (#96437 and #96438), VINNOVA (#2020–04841) and AIDA (#2024). JW is a founder and shareholder in Uman Sense AB.

1.1 HAEMORRHAGIC – Aneurysms

036/343 ROBOTIC ASSISTED CEREBRAL ANEURYSM ENDOVASCULAR TREATMENT

Kamil Zeleňák*. *Jessenius Faculty of Medicine, Comenius University, Clinic of Radiology, Martin, Slovakia*

10.1136/jnis-2023-ESMINT.36

Introduction Recently introduced robotic assisted neurointervention holds exciting future potential in the treatment of neurovascular diseases.
Aim of Study The aim of this study was to evaluate the application of CorPath GRX robotic platform for coiling, stenting, and flow-diversion treatments of cerebral aneurysms.
Methods This is the largest to date case series from a single physician treating 43 cerebral aneurysm patients using the Corpath GRX Robot (Siemens Healthineers Endovascular Robotics, Newton, Massachusetts, USA) from March 2022 to March 2023.
Results Coiling alone was performed in 4 patients, both coiling and stenting in 8 patients, and 31 patients underwent flow-diversion. Five patients presented with ruptured aneurysms while the rest were unruptured. Internal Carotid Artery was the most common location at 44.2% (19/43) and the mean aneurysm height and neck width were 6.0 ± 2.6 mm and 4.2 ± 2.5 mm respectively. All procedures were performed successfully with no intra-operative complications. Only two conversions to manual technique occurred.
Conclusion This series affirms the feasibility, efficacy and safety of robotic-assisted cerebral aneurysm treatments, and serves as a stepping stone towards the potential future application of building on the current technological platform for achieving the goal of remote thrombectomy.
Disclosure of Interest n/a