Introduction The European EYMINT tele-observership (e-fellows) was initially launched in 2020 and has since enrolled 72 neurointerventional fellows. These have live remote access to procedures performed by individually assigned specialists (mentors) at geographically distant high volume neurointerventional centers.

Aim of Study 1) Assessment of situational awareness during remote attendance of neurointerventional procedures. 2) Assessment of learning progress among participants.

Methods Prospective evaluation of telestreamed cases from 2020 to 2023 via anonymous questionnaires for trainees and mentors.

Results From 06/2020 to 04/2023 a total of 498 cases were transmitted to fellows using telestream technology (33% Aneurysm, 29% AVM/AVF, 27% Ischemic Stroke). Although not being physically present, a high level of situational awareness for the procedure (levels 4+5 on a Lickert scale from 1–5) was reported by 81.9% of fellows. The impact of the fellowship on knowledge improvement during neurointerventional training was reported to be large by 55% of participants. Technical knowledge (handling of devices) and procedural knowledge (sequence of interventional steps) were equally described to be the areas of particular improvement. Remote attendance of complex aneurysm cases (intrasaccular devices, flow diversion) seemed to deliver most value in terms of learning progress. Nevertheless, some participants stated more value from a different perspective on a common procedure, i.e. a thrombectomy.

Conclusion Tele-observerships may supplement neurointerventional hands-on training in particular of low-frequency high-complexity procedures.

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Preventive Administration of Vasoactive Amines is Effective in Countering Balancing Significative Blood Pressure Drops When Nimodipines are Administered During Mechanical Thrombectomy Procedures

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Introduction During endovascular treatment of acute ischemic stroke (AIS), vasospasm can occur when materials used for mechanical thrombectomy come into contact with cerebral arteries. Nimodipine is commonly administered intra-arterially, but lowering blood pressure in AIS patients can increase neural loss affecting the patient’s clinical outcome.

Aim of Study This study assessed whether continuous infusion of vasoactive amines counteracted the hypertensive effect of
FACTORS ASSOCIATED WITH SUCCESSFUL RECANALIZATION IN PATIENTS WITH ACUTE ISCHEMIC STROKE TREATED WITH ENDOVASCULAR THROMBECTOMY – A NATIONWIDE REGISTER-BASED OBSERVATIONAL STUDY

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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 findings 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.

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1.1 HAEMORRHAGIC – Aneurysms

ROBOTIC ASSISTED CEREBRAL ANEURYSM ENDOVASCULAR TREATMENT

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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 $6.0 \pm 2.6$ mm and $4.2 \pm 2.5$ 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