Introduction More than ten years of experience as reported by interventional cardiologists has demonstrated several advantages of transradial access (TRA). The decreased risk of access site haemorrhagic complications is particularly relevant for mechanical thrombectomy (MT). This alternative approach should be explored in greater detail, as questions regarding feasibility and safety still exist among interventional neuroradiologists.

Aim of Study To present our single institution experience considering the feasibility, complications, and technical features of TRA.

Methods Retrospective review of MT performed via TRA between May 2021 and February 2023.

Results A total of 17 patients were identified (female 10, male 7, mean age of 79,25 years). Of the 17 TRA performed, 15 were conducted after transfemoral access (TFA) failure and 2 were performed as the primary approach. Right-sided TRA was obtained in all cases. Successful revascularization (Thrombolysis in Cerebral Infarction score $\geq$2b) was obtained in 9 cases. The single-pass recanalization rate was 44% and the average number of passes was 1,87. No major radial artery complications were recorded, except for one case of artery rupture, that was well-managed with manual compression. Anatomical variant with bovine aortic arch was present in two patients. The main cause for TRA failure was small radial artery diameter.

Conclusion These results suggest that TRA is a viable alternative to TFA. In addition to the decreased incidence of haemorrhagic complications, TRA may also be particularly useful for stroke patients whose vascular anatomy presents a challenge for TFA (e.g., bovine aortic arch configuration and marked supra-aortic branch tortuosity).

Disclosure of Interest Nothing to disclose.

P148/154 SAFETY AND EFFICACY OF EPTIFIBATIDE IN MECHANICAL THROMBECTOMY COMPLICATED BY INTRACRANIAL ATHEROSCLEROTIC DISEASE OR OTHER PATHOLOGY WARRANTING AGGRESSIVE ANTI-PLATELET THERAPY

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10.1136/jnis-2023-ESMINT.176

Introduction Mechanical thrombectomy for large vessel occlusion can be complicated by undelrying intracranial atherosclerotic disease (ICAD), dissection or tandem occlusions predisposing to re-occlusion and poor outcomes. The terminology unstable vessel wall (UVW) has been used to describe these conditions mandating aggressive anti-platelet therapy (aAPT). Data on concurrent aAPT therapy with thrombectomy is lacking.

Aim of Study To evaluate the safety and efficacy of Eptifibatide (EPT) in thrombectomy complicated by UVW.

Methods This study analysed characteristics, procedural details and follow-up imaging of patients who received Eptifibatide between March 2022 and May 2023. Haemorrhage defined by ECASS criteria and patency of the index artery on follow-up imaging has been evaluated to assess the safety and efficacy of EPT respectively.

Results 16 consecutive patients (mean age: 57.0 ± 18.3 years, male n = 13) presenting with a mean NIHSS score of 11 received Eptifibatide during study period. 11 had thrombectomy complicated by ICAD while 5 had extracranial carotid stenting with one having both. In the ICAD group, 8 patients had repeat thrombectomy while 3 had intracranial angioplasty and one patient proceeding to intracranial stenting. TICI2b/3 recanalisation was achieved in all patients except one presenting with flow diverting stent occlusion. H12 haemorrhage occurred in 3 patients on early follow-up CT, but no HI1 or PH haemorrhage. Follow-up CTA confirmed vascular patency in all patients with successful TICI 2b/3 recanalisation.

Conclusion Eptifibatide was shown to be a safe and effective adjunct to mechanical thrombectomy complicated by UVW. Further studies are recommended.

Disclosure of Interest Presenting author has/had consultancy agreements with Stryker Neurovascular, Medtronic and Microvention Terumo and served as PI for SWIFT DIRECT study at St.George's NHS Foundation Trust, London.

P149/163 A COMPARATIVE IN VITRO STUDY OF MANUAL AND ROBOT-ASSISTED MECHANICAL THROMBECTOMY

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10.1136/jnis-2023-ESMINT.177

Introduction Robot-assisted endovascular treatment (EVT) of stroke is a promising alternative to allow immediate treatment in patients located away from comprehensive stroke centers.

Aim of Study We aimed to explore the feasibility and efficacy of robot-assisted EVT.

Methods Clot analogs were used to create middle cerebral artery (M1-MCA) occlusions in a benchtop 3D printed model. After occlusion, experiments were allocated to be treated manually by a peripheral interventionalist with basic EVT training (Manual-EVT) or with the Corindus Corepath robot by an expert neurointerventionalist (Robotic-EVT). Thrombectomy technique consisted of retrieving the SR into a balloon guide catheter under proximal flow arrest and continuous aspiration.

First pass recanalization (FPR= TICI 2c-3) was assessed, and distal emboli were collected and analyzed after each experiment.

Results Overall, 45 experiments were performed with Robotic-EVT (n=24) or Manual-EVT (n=21). Rate of complete recanalization tended to be higher with Robotic-EVT (95.8%) than with Manual-EVT (71.4%; p=0.06). The mean count of collected emboli in the distal filter was similar: Robotic-EVT: 19.67±17 Vs Manual-EVT: 16.67±13 (p=0.59). The mean duration per pass was longer with Robotic-EVT (6.8±1.5 minutes) than with Manual-EVT (3.8±1.6 minutes; p<0.01).

Conclusion In experimental bench conditions, robot-assisted EVT performed by experienced neurointerventionalists is feasible and highly effective without inducing substantial procedural delays.

Disclosure of Interest MR received research funding from Medtronic and
Vesalio MR declares ownership of Anaconda Biomed and Methinks shares. MR received consulting fees from Anaconda Biomed, Apta Targets, Medtronic, Stryker,

Cerenovus, and Philips. AT reports receiving consulting fees from Anaconda Biomed,

Balt, Medtronic, MicroVention, Cerus, Merlin Medical, and Stryker.

P150/168 ACUTE ISCHEMIC STROKE DUE TO DISTAL VESSEL OCCLUSION TREATED WITH PRESET LITE STENT RETRIEVER. SINGLE CENTER EXPERIENCE

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10.1136/jnis-2023-ESMINT.178

Introduction Mechanical thrombectomy (MT) is standard treatment for large vessel occlusion (LVO). Despite MT is increasingly performed for distal vessel occlusions (DVO), evidence for its clinical benefit remains scarce.
Aim of Study In this study we assessed Single-Center efficacy and safety of DVO MT using stent retriever pREset-LITE (Phenox).
Methods Of 461 MT performed in our Center between 01/2021–04/2023, we treated with pREset 79 DVO in 71 consecutive Pt (median age 71,66/range 42–93, median NIHSS 13/range 6–24).
Results 71 Pt with 79 DVO underwent MT using pREset-LITE (3x20 o 4x20 mm).

73/79 cases pREset was used in combination with proximal aspiration catheter.

49 cases (62%) are primary distal occlusion, others were associated with PLVO.

We perfomed 61 MT on M2 segment (61/79, 77,2%), 7 on M3/M4 (8,9%), 7 on A2/A3 (8,9%) and 4 on P2-P3 (5,1%).

We performed a single-pass in 54 cases (68,3%), 2 passes in 11 (13,9%), ≥3 passes in 8 (10.1%).

TICI 3 was observed in 51 Pt (71,8%), TICI 2b/c in 15 Pt (21,1%), TICI 0/1 in 5 cases (7%).

Post-procedural asymptomatic SAH was observed in 26 Pt (36,6%), asymptomatic ICH in 8 (11,2%).

1 case of vessel rupture during MT lead to post-procedural exitus in 24h.

7 Pt (8,9%) died within 1 month after MT for clinical situation out of ischemic stroke.

mRS≤2 at 3 months was observed in 58 Pt (80.5%).
Conclusion Our Single-Center experience shows safety and efficacy of pREset stent retriever in MT for DVO. Further research is needed.
Disclosure of Interest Nothing to disclose

P151/175 DIRECT ASPIRATION WITH EMBOVAC – FIRST CLINICAL EXPERIENCE AND CLOT COMPOSITION (RESULTS THE "PERFECT' STUDY)

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10.1136/jnis-2023-ESMINT.179

Introduction EMBOVAC is a large bore aspiration catheter with an inner diameter of 0.071'.
Aim of Study PERFECT (NCT04531904, CERENOVUS) was a prospective, post-market, single-arm study to assess direct aspiration with EMBOVAC as first line therapy in patients with large vessel occlusion and analyse the composition of retrieved thrombus.
Methods Subjects were enrolled and followed across 11 European centres between October 2020 and July 2022. A minimum of 3 direct aspiration passes with EMBOVAC were mandated before switching strategy. The primary endpoint was core-lab assessed successful reperfusion (mTICI≥2b) post-procedure. Other outcomes included 90-day mRS by an independent evaluator, symptomatic intracerebral hemorrhage by an independent Clinical Events Committee, and clot analysis by an independent central clot lab.
Results Final mTICI≥2b was achieved in 98.0% (97/99) while final mTICI≥2c was reached in 86.9% (86/99) of patients. Final mTICI≥2b without rescue was reached in 87.9% (87/99). First pass mTICI≥2c without rescue was achieved in 53.5% (53/99). mRS≤2 at 90 days was 56.6% (56/99). All-cause mortality at 90 days was 12.9%. No patients experienced sICH at 24 hours post-procedure. One device-related SAE occurred within 90 days. Composition analysis revealed median 54.80% red blood cells and 24.90% fibrin.
Conclusion This is the first clinical evaluation of EMBOVAC. Direct aspiration with EMBOVAC as first line therapy resulted in high rates of reperfusion and favorable clinical outcomes. Clot composition analysis can aid in better understanding of the stroke etiology and means for effective clot removal.
Disclosure of Interest Acandis (OJ, CL, JF); Microvention (GM, CC, JF); Stryker (GM, CC, JF); Medtronic (GM, CC, JF); Surge2surgery (BG); MIVI (CC); Phenox (CL, JF); Penumbra (CL, JF); GSK (AS); German Ministry of Science & Education and Economy & Innovation, EU, Hamburgische Investitions-/Förderbank, Philips, Bayer, Boehringer Ingelheim,