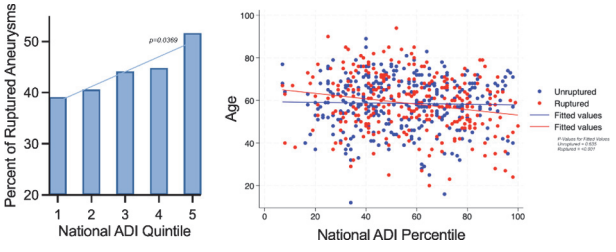
subarachnoid hemorrhage. Specific regions, such as rural areas, have reduced access to interventional treatments for high-grade cases.Socioeconomically disadvantaged patients often reside in these areas with limited access to specialty care and aneurysm screening.We analyzed the link between socioeconomic status and ruptured intracranial aneurysm presentation, using Area Deprivation Index(ADI) to measure neighborhood adversity.We propose that individuals in lower ADI quartiles experience more pre-rupture screenings and interventions, whereas those in higher quartiles present more frequently with ruptured aneurysms.

Methods In a retrospective cohort study at our comprehensive stroke center from 2018–2024, we reviewed ADI, race, gender, employment, insurance, smoking,and marital-status of patients with cerebral aneurysms. Socioeconomic adversity was evaluated using ADI, insurance, and employment. Statistical analysis involved the Cochran-Armitage trend test and multivariate logistic regression to ascertain the impact of demographics and socioeconomic status on ruptured aneurysm incidence.

Results Our sample included 651 patients treated for a first cerebral aneurysm; 43.9%(n=286) presented with rupture. The majority were female (68.5%, n=446) with an average age of 58.6 ± 12.8 years. Racially, 81.8%(n=531) were White, 7.7%(n=50) Black, and 2.6%(n=17) Hispanic. Private-insurance covered 39.1%(n=253), while 38.2%(n=247) had Medicare. Employed individuals comprised 30.1%(n=195), and 34.7%(n=225) were unemployed; 48.1%(n=313) were married.Anatomical evaluation revealed the Anterior communicating artery(ACOM) as the most common aneurysm site in 26.2%(n=170) of cases, followed by the posterior communicating artery(PCOM) at 18.6%(n=121). Treatment modalities included Coil treatment in 32.2%(n=210), Flow Diversion in 29.3%(n=191), Clipping in 16.1%(n=105), and Stent-Assisted Coil in 13.4%(n=87).Demographic analysis showed significant trends with ADI quintiles: higher proportions of male and African-American patients were in the most deprived quintile (p<0.0001), indicating socioeconomic-based disparities. Additionally, Medicaid coverage and unemployment rose with more deprived ADI quintiles(p<0.0001 and p=0.001, respectively). Marital status and treatment choice had no significant association with ADI quintiles.We noted an increased rupture-rate across ADI quintiles(p=0.0369). Multivariate analysis revealed that a higher ADI percentile, indicative of greater socioeconomic adversity, correlated with a higher rupture likelihood(p=0.033).Medicare patients had a higher rupture incidence compared to those with private insurance(p=0.019), while gender did not predict rupture presentation(p=0.256).

Conclusions Higher ADI, demonstrating lower socioeconomic status, is an independent-positive predictor for the presentation of ruptured cerebral aneurysms, indicating that socioeconomic disparities contribute to the complexity of the management of patients with cerebral aneurysms. We hypothesize that patients in lower ADI quartiles are more likely to undergo screening and treatment of aneurysms prior to rupture.



Abstract E-043 Figure 1

Disclosures A. Gajjar: None. **S. Bandlamuri:** None. **M. Abe:** None. **S. Bheemireddy:** None. **A. Boulos:** None. **J. Yamamoto:** None. **J. Dalfino:** None. **N. Field:** None. **A. Paul:** 2; C; MicroVention.

E-044 DURAL VENOUS SINUSES OUTFLOW ANATOMY CLASSIFICATION AND PREDICTION OF TRANSVERSE SINUS STENTING PERFORMANCE

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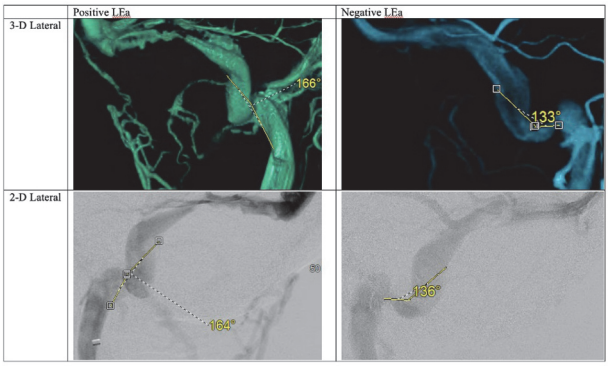
Objective The treatment of symptomatic transverse sinus (TS) stenosis by neurointerventional techniques is becoming more popular. Having the ability to predict procedural success and complexity holds a potential to increase success and reduce complication rates. Here we tried to assess procedural complexity by dural venous geometry parameters.

Methods We reviewed TS stenting or stent assisted coiling of all the patients treated for symptomatic TS stenosis during august 2021 and October 2023. The dataset was divided into two groups based on the shallowest angle between the nadirs of the 3 turns – internal jugular vein, jugular foramen and proximal curve of the sigmoid sinus (the angle of lowest energy, LEa) and further comparison between these groups characteristics and procedural metrics was performed.

Results Out of 20 procedures, six were on the positive LEa group and 14 on the negative. The only significant difference between the groups was the interventional time (7.3 ± 1.4 min for positive, and 18.9 ± 6.4 min for negative LEa; p = 0.004), as a surrogate of procedure complexity, and the height

Abstract E-044 Table 1

	Positive LEa	Negative LEa
3-D Lateral		
2-D Lateral		



Abstract E-044 Figure 1 Example of the angle of lowest energy, measured on 2-D and 3-D lateral venograms of two different patients, represented in to different columns

of the jugular bulb (9.5 ± 2.5 mm for positive, and 14.0 ± 3.1 for negative LEa; p = 0.04).
Conclusion Negative LEa significantly increases interventional time and therefore could potentially predict procedural complexity. This knowledge may facilitate the preprocedural planning process, increase success and reduce compilation rates.
Disclosures O. Haim: None.

E-045 SECOND LINE THROMBECTOMY TECHNIQUE FOLLOWING AN UNSUCCESSFUL FIRST PASS THROMBECTOMY FOR ANTERIOR CIRCULATION LARGE VESSEL OCCLUSION STROKE: TO SWITCH OR NOT TO SWITCH?

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Introduction Despite comparable outcomes for different front-line techniques in mechanical thrombectomy (MT) for acute ischemic stroke (AIS), there are sparse data regarding if and when to switch techniques if the first-pass MT is unsuccessful. We investigated the converting from one MT technique to another on the second MT attempt for AIS among patients with anterior circulation large vessel occlusion (LVO).
Methods This was a retrospective observational study using data from the large multicenter international 'anonymous'. Data from 29 stroke centers for 10,229 patients between January 2010 and December 2022 was investigated. The primary outcome measure was successful recanalization defined as a modified Thrombolysis in Cerebral Ischemia score ≥2b. 90-day modified Rankin score (mRS) 0–2, mortality and symptomatic hemorrhage were used as secondary outcomes. Clinical and technical outcomes after the second MT attempt were compared between those with or without technique conversion.
Results 1,797 patients with unsuccessful first-pass MT were included in this analysis. Converting to alternative techniques following an unsuccessful first-pass MT was more likely to be associated with successful recanalization at the second attempt (adjusted odds ratio 2.30, 95% CI: 1.37–3.86, P = 0.002) and 90-day good clinical outcome (adjusted odds ratio 2.10, 95% CI: 1.15–3.85, P = 0.02) after multivariate adjustment.
Conclusions This study demonstrates better clinical and technical outcomes with the conversion of the MT technique for the second attempt in AIS patients with anterior circulation LVO and an unsuccessful first-pass MT.
Disclosures H. Matsukawa: 2; C; B. Braun. 3; C; Daiichi-Sankyo, Stryker. **K. Uchida:** 3; C; Daiichi-Sankyo, Bristol-Myers Squibb, Stryker, Medtronic. **A. Alawieh:** None. **C. Matouk:** 1; C; Contact PI for NIH Grant R21NS128641. . 2; C; Stryker, Medtronic, Microvention, Penumbra, and Silk Road Medical. 3; C; Speaker for Penumbra and Silk Road Medical. **S. Al Kasab:** None. **M. Sowlat:** None. **S. Elawady:** None. **R. Abo Kasem:** None. **J. Isidor:** None. **I. Maier:** 3; C; speakers honoraria from Pfizer and Bristol-Myers Squibb. **P. Jabbour:** None. **J. Kim:** None. **S. Quintero Wolfe:** None. **A. Rai:** None. **R. M Starke:** 1; C; RMS research is supported by the NREF, Joe Niekro Foundation, Brain Aneurysm Foundation, Bee Foundation, Department of Health Biomedical Research Grant (21K02AWD-007000) and by National Institute of H, RMS has an unrestricted research grant from Medtronic and Balt and has consulting and teaching agreements with Penumbra, Abbott, Medtronic, Balt, InNeuroCo, Cerenovus, Naglreiter, Tonbridge, Von Medic. **M. Psychogios:** 1; C; Grants from the Swiss National Science Foundation (SNF) for the DISTAL trial (33IC30_198783) and TECNO trial (32003B_204977), Grant from Bangerter-Rhyner Stiftung for the DISTAL trial. Unrestricted Gr. 3; C; Speaker fees: Stryker Neurovascular Inc., Medtronic Inc., Penumbra Inc., Acandis GmbH, Phenox GmbH, Siemens Healthineers AG. **E. Samaniego:** 2; C; consults for Medtronic, microvention, Rapid Medical. **H. Cuellar:** 2; C; Consultant for Medtronic and Microvention. **B. Howard:** None. **D. Romano:** 2; C; Penumbra, Balt, Microvention, Phenox. **O. Tanweer:** 1; C; Educational/Research Grants: Q'apel Inc, Steinberg Foundation. 2; C; Consulting Agreements: Viz.AI, Inc., Penumbra, Inc, Balt, Inc, Stryker Inc, Imperative Inc. **J. Mascitelli:** None. **I. Fragata:** None. **J. Osbun:** None. **R. Crosa:** None. **M. S. Park:** 2; C; Consultant for Medtronic. **M. R. Levitt:** 1; C; Unrestricted educational grants from Medtronic and Stryker;. 2; C; consulting agreement with Medtronic, Aeaean Advisers and Metis Innovative. 6; C; equity interest in Proprio, Stroke Diagnostics, Apertur, Stereotaxis, Fluid Biomed, and Hyperion Surgical; editorial board of Journal of NeuroInterventional Surgery; Data safety monitoring board of Ar. **W. Brinjikji:** 2; C; He receives consulting fees from Medtronic, Stryker, Imperative Care, Microvention, MIVI Neurovascular, Cerenovus, Asahi, and Balt. 6; C; Holds equity in Nested Knowledge, Superior Medical Editors, Piraeus Medical, Sonoris Medical, and MIVI Neurovascular. He receives royalties from Medtronic and Balloon Guide Catheter Technology, He serves in a leadership or fiduciary role for MIVI Neurovascular, Marblehead Medical LLC, Interventional Neuroradiology (Editor in Chief), Piraeus Medical, and WFITN. **M. Moss:** None. **T. Dumont:** None. **R. Williamson Jr:** 2; C; Consultant for Medtronic, Stryker, and Synaptive Medical. **P. Navia:** 2; C; Consultant for Penumbra, Medtronic, Stryker, Cerenovus and Balt. **P. Kan:** 1; C; Grants from the NIH (1U18EB029353–01) and unrestricted educational grants from Medtronic and Siemens. Consultant for