

accurate. The SMOG scores and associated reading level of the different LLM can be seen in table 1. The ANOVA of mean SMOG scores was statistically significant ( $F(5, 12) = 11.48, p = 0.0003$ ). There was a significant difference in the scores for texts processed by Custom GPT ( $M = 11.06, SD = 1.57$ ) compared to nearest performing CoPilot ( $M = 14.25, SD = 1.44$ );  $t(4) = -5.03, p = 0.004$ . The mean of the difference scores was  $-3.19$  (95% CI:  $-4.4576$  to  $-1.9224$ ).

**Conclusions** Our study demonstrates the potential to develop a customized GPT model capable of providing concise, accurate patient responses at an eighth-grade reading level. By incorporating provider-selected documents, the model ensures reliable information sourcing. This nascent yet flexible technology lays the groundwork for various patient education applications. We aim to deploy this tool in clinics, allowing patient interaction via tablets, with the ultimate goal of creating a universally accessible system for home use.

**Disclosures** A. Brake: None. S. Byer: None. J. Schmidt: None. E. Samaniego: None.

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### MEDIUM VESSEL OCCLUSION ASPIRATION THROMBECTOMY USING FREECLIMB 54 CATHETER DELIVERED BY TENZING 5: EARLY MULTICENTER CLINICAL EXPERIENCE

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10.1136/jnis-2024-SNIS.291

**Introduction** Medium-vessel occlusions (MeVO) of the M2/3, A2/3, and P2/3 segments account for 25%-40% of all acute ischemic stroke (AIS) cases. Clinical outcomes of primary MeVO stroke vary, with limited efficacy and eligibility for intravenous thrombolysis. Clinical trials are currently ongoing to determine the benefit of thrombectomy in primary MeVO AIS. Furthermore, improved outcomes may be seen with higher reperfusion scores resulting from additional thrombectomy passes for secondary MeVO. The M2 segment MCA diameter ranges from 1.1 to 2.7 mm. Use of larger catheters and size-matching for aspiration thrombectomy (AT) is associated with increased aspiration flow rates, first pass effect, faster recanalization, and better reperfusion scores. The FreeClimb™ 54 (Route 92, San Mateo, CA) was recently introduced (distal 0.054 inch inner diameter and a 1.7 mm distal outer diameter), packaged with a specialized shelf or ledge-reducing delivery catheter with a tapered distal tip, Tenzing 5 (Route 92, San Mateo, CA). We report our initial off-label multicenter experience using the FreeClimb 54 delivered over Tenzing 5 in the treatment of MeVO AIS.

**Materials and Methods** After local IRB approvals, we retrospectively reviewed and collected the clinical, procedural and imaging data of consecutive patients who underwent off-label MeVO AT with the FreeClimb 54 and Tenzing 5 at 7 different institutions from September 2023 to March 2024. After initial selective catheterization of the occluded vessel with Tenzing 5, with or without a leading 0.014 inch microwire, the FreeClimb 54 was then advanced over the Tenzing catheter to the angiographic limit of contrast under roadmap

fluoroscopic guidance. The Tenzing 5 was then removed and the FreeClimb 54 catheter was allowed to passively advance in the vessel. Vacuum pump aspiration was then applied to the FreeClimb 54 for 2–5 minutes.

**Results** Thirty nine patients were treated, aged  $70 \pm 18$  years, 21 (54%) of which were female. Twenty-seven (69%) had a primary MeVO and 12 (31%) had a secondary MeVO. Freeclimb 54 was successfully delivered over the Tenzing 5 to the target occlusion in 39/39 (100%) of cases (29 M2, 4 M3, 1 M1 segment MCA, 2 A2, 1 A3 segment ACA, and 2 P2 segment PCA). Average target vessel diameter was  $1.6 \pm 0.3$  mm. No stent-retrievers were needed, neither for delivery of the FreeClimb 54. One Trevo was used for an additional thrombectomy pass. A leading microwire was used to advance the Tenzing 5 to the target occlusion in 34/39 (87%). For primary MeVO, complete reperfusion (mTICI 2C or 3) was achieved in 21/27 (78%) after a median of 1 (IQR 1–1) pass, with first pass effect (2C or 3) in 21/27 (78%). Low grade vasospasm was observed at the MeVO site in 7/39 (18%). One patient developed a transient carotid-cavernous fistula. There was one symptomatic intracranial hemorrhage (PH4 and SAH) (1/39, 3%) involving a single pass M3 (1.0 mm caliber) MeVO. Average NIHSS decrease at discharge from presentation was  $5.7 \pm 6.1$ .

**Conclusions** Initial clinical experience supports access to intracranial MeVO using Tenzing 5 and FreeClimb 54, for rapid and effective reperfusion with low complication rate.

**Disclosures** F. Settecase: 1; C; Stryker, Microvention. 2; C; Route 92 Medical, Stryker. 4; C; Route 92 Medical. A. Puri: 2; C; Microvention, Imperative Care, Depuy Synthes Products, Inc., Merit, Stryker, Medical Device Business Services, Inc. 6; C; Microvention. R. Budzik: None. P. Pema: 2; C; Microvention. 6; C; Microvention, Route 92 Medical. R. Khangura: None. W. Kim: 2; C; Route 92 Medical, Stryker. 4; C; Route 92 Medical. N. Telischak: 2; C; Route 92 Medical, Microvention, Stryker. B. McGuinness: 2; C; Route 92 Medical. S. Lee: 2; C; Route 92 Medical. M. Alexander: 2; C; Route 92 Medical. 6; C; Medtronic. J. Singh: 1; C; Stryker. A. Kuhn: None. J. Kim: None. J. English: 2; C; Route 92 Medical, Stryker. 4; C; Route 92 Medical. J. Caldwell: 2; C; Route 92 Medical. 3; C; Medtronic, Tonbridge Medical.

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### OPHTHALMIC ANEURYSMS OUTCOMES FOLLOWING FLOW DIVERSION: LARGE VOLUME TERTIARY CENTER EXPERIENCE

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10.1136/jnis-2024-SNIS.292

**Introduction and Purpose** Flow diversion (FD) is safe and popular method for carotid ophthalmic aneurysms (COA) treatment. Several nuances challenge treatment outcomes. We aim to explore long-term outcomes of ophthalmic aneurysms treated with flow diversion alone, or with adjunctive coil embolization, based on the origin of the ophthalmic artery in relation to the aneurysm sac.

**Methods** Retrospective analysis of prospectively collected tertiary center data of patients with carotid ophthalmic aneurysms treated with flow diversion stents, with or without coil embolization. Four different subtypes of CAO's were previously described: Type A. Ophthalmic artery (OA) originates directly