TracStar LDP

The TracStar LDP large-bore guide catheter is safe and effective at navigating the tortuous vascular anatomy often encountered during mechanical thrombectomy for large vessel occlusion. The flexible distal and stiffer proximal components provide a good combination of navigability and support for use in endovascular treatment. [1].

Most conventional 0.088 inch guide catheters cannot safely navigate intracranial vasculature. The objective of this study is to evaluate the safety of stroke thrombectomy using a novel 0.088 inch guide catheter designed for intracranial navigation.

A multicenter retrospective study, which included patients over 18 years old who underwent thrombectomy for anterior circulation large vessel occlusions. Technical outcomes for patients treated using the TracStar Large Distal Platform (TracStar LDP) or earlier generation TRX LDP were compared with a matched cohort of patients treated with other commonly used guide catheters. The primary outcome measure was device-related complications. Secondary outcome measures included guide catheter failure and time between groin puncture and clot engagement.

Each study arm included 45 patients. The TracStar group was non-inferior to the control group with regard to device-related complications (6.8% vs 8.9%), and the average time to clot engagement was 8.89 min shorter (14.29 vs 23.18 min; p=0.0017). There were no statistically significant differences with regard to other technical outcomes, including time to recanalization (modified Thrombolysis In Cerebral Infarction (mTICI) ≥2B). The TracStar was successfully advanced into the intracranial internal carotid artery in 33 cases (73.33%); in three cases (6.67%), it was swapped for an alternate catheter. Successful reperfusion (mTICI 2B-3) was achieved in 95.56% of cases. Ninety-day follow-up data were available for 86.67% of patients, among whom 46.15% had a modified Rankin Score of 0-2%, and 10.26% were deceased.

Tracstar LDP is safe for use during stroke thrombectomy and was associated with decreased time to clot engagement. Intracranial access was regularly achieved [2].

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2)
Bageac DV, Gershon BS, Vargas J, Mokin M, Ren Z, Chada D, Turk AS, Chaudry MI, Turner RD, Fifi JT, Shigematsu T, De Leacy R. Comparative study of intracranial access in thrombectomy using next generation 0.088 inch guide catheter technology. J Neurointerv Surg. 2022 Apr;14(4):390-396. doi: 10.1136/neurintsurg-2021-017341. Epub 2021 May 26. PMID: 34039682.