MULTICENTER ASSESSMENT OF THE TIGERTRIEVER 13 FOR THROMBECTOMY IN PRIMARY MEDIUM VESSELS OCCLUSIONS

Introduction and Aim of the Study To evaluate the safety and efficacy of the Tigertriever 13 (Rapid Medical, Yoqneam, Israel) stent-retriever in acute ischemic stroke (AIS) patients with a primary medium vessel occlusion (MeVO).1

Methods A retrospective review of the DMVO Consortium, a synthesis of prospectively maintained databases at XX academic institutions in North America, Asia, and Europe, was performed to analyze consecutive AIS patients who underwent thrombectomy with the Tigertriever 13 for a primary MeVO.

Patients’ characteristics, procedural complications, angiographic and clinical outcomes were reviewed.

Results Between January 2017 and January 2022, 58 patients and MeVO were included (53% female, median age 77 [63–83] years, 50% of IVtPA before thrombectomy). The Tigertriever13 was used in 46/58 (79%), as a first-line stentretriever and in 12/58 (21%) as a rescue-device after failure of another technique. Overall, the successful reperfusion rate (mTICI score of 2b-3) and revascularization rate was 93% (10.0% [95%CI 0.0–23.1%] vs stent) with stent vs. 5.7% without [95%CI 0.0–13.4%]; P = .56). The symptomatic intracranial hemorrhage (ICH) rate at 24 hours was 7.3% (5.0% with stent [95%CI 0.0–14.6%] vs. 8.6% without [95% CI 0.0–17.8%]; P = .62).

Conclusions Aspiration thrombectomy restored blood flow and resulted in good 90-day functional outcome in AIS patients with anterior circulation tandem lesion. The 90-day mortality rate in these patients was low. Clinical outcomes were similar between patients with and without stenting.

Do you have any conflict of interest to declare?: Yes

Conflict of Interest Statement Consultancy for Rapid Medical (travel grant only)

ASPIRATION THROMBECTOMY OF ACUTE ISCHEMIC STROKE PATIENTS WITH ANTERIOR CIRCULATION TANDEM LESION

Introduction The study evaluated safety and efficacy of aspiration thrombectomy in acute ischemic stroke (AIS) patients with anterior circulation tandem lesion.

Methods Patients with anterior circulation tandem lesion were extracted from a global, prospective multicenter registry (COMPLETE) that enrolled 650 adults with large vessel occlusion who underwent aspiration thrombectomy with the Penumbra System. Primary efficacy endpoints were post-procedure angiographic revascularization (mTICI score of 2b-3) and 90-day functional outcome (mRS of 0–2). The primary safety endpoint was 90-day all-cause mortality. Revascularization rates were evaluated by core lab and safety data were adjudicated independently. Outcomes of patients with and without stenting were compared.

Results The COMPLETE study enrolled 55 patients with anterior circulation tandem lesions; 20 of those received a stent, and 35 did not. The successful revascularization rate was 89.1%. Good 90-day functional outcome rate was 63.5% (72.2% [95%CI 51.5–92.9%] with stent vs. 58.8% without [95%CI 42.3–75.4%]; P=.34). The 90-day all-cause mortality rate was 7.3% (10.0% [95%CI 0.0–23.1%] vs stent with 5.7% without [95%CI 0.0–13.4%]; P = .56). The symptomatic intracranial hemorrhage (ICH) rate at 24 hours was 7.3% (5.0% with stent [95%CI 0.0–14.6%] vs. 8.6% without [95% CI 0.0–17.8%]; P = .62).

Conclusions Aspiration thrombectomy restored blood flow and resulted in good 90-day functional outcome in AIS patients with anterior circulation tandem lesion. The 90-day mortality rate in these patients was low. Clinical outcomes were similar between patients with and without stent.

Do you have any conflict of interest to declare?: Yes

Conflict of Interest Statement Zaidat: Grant/research support: Genentech, Medtronic Neurovascular, Stryker; Consultant: Codman, Medtronic Neurovascular, National Institutes of Health (NIH) StrokeNet, Penumbra, Stryker. Other financial or material support: Honoria: Codman, Medtronic Neurovascular, Penumbra, Stryker. Expert witness. Ownership interest: Galaxy Therapeutics, LLC.

Fifi: Grant/research support: Viz.ai. Consultant: Microvention, Stryker, Cereneous, Penumbra. Other financial or material support: Ownership interest: Imperative Care. DSMB: MIVI, Serenity, Magneto.

Hassan: Consultant/Speaker: Medtronic, Microvention, Stryker, Penumbra, Cereneous, Genentech, GE Healthcare, Scientia, Balt, Viz.ai , Insera therapeutics, Proximie, NeuroVasc, NovaSignal, Vesalio, Rapid Medical, Imperative Care and Galaxy Therapeutics; Principal Investigator: COMPLETE study –