Rankin Score of 2 or less). The purpose of our study was to evaluate the incidence and causes of persistent occlusion of intracranial large vessel occlusion following mechanical thrombectomy at our high-volume comprehensive stroke center, with the goal of providing some insight into potential ways to increase recanalization rates in future patients.

Methods After institutional board approval, a prospectively maintained institutional thrombectomy database for acute ischemic stroke was queried from 2015 to present. Patients with documented large vessel occlusion in the intracranial circulation and failure to recanalize after attempted mechanical thrombectomy were included for analysis. Patient characteristics including age, sex, co-morbidities, baseline NIHSS score, and baseline ASPECTS, were recorded. Rates of symptomatic hemorrhage, final ASPECTS, need for decompressive hemicraniectomy, and outcomes at 90 days (modified Rankin Scale) were also included. The statistical package R was used for analysis.

Results 24 out of 368 patients with LVO and acute ischemic stroke had persistent TICI 0 occlusions after attempted mechanical thrombectomy. 15 patients were male. Mean age of patients with persistent TICI 0 was 68.8 years (range 44 to 94 years). A combination of stent-retrievers and direct aspiration (solumbra) was used for mechanical thrombectomy in all cases where the lesion was accessible. The most common reason for persistent TICI 0 was failure to recanalize despite adequate stent apposition and aspiration, which occurred in 18 out of 24 cases, or 75% of cases. Inability to pass a microwire through the site of occlusion was the second most common reason for persistent TICI 0, which occurred in 5 out of 24 of cases (21%). Inability to select the proximal great vessels due to extreme tortuosity only occurred in one case. 11 out of the 24 patients with persistent TICI 0 occlusions died within 90 days of attempted thrombectomy.

Conclusions The rate of TICI 0 mechanical thrombectomy was extremely low in our series, accounting for only 7% of thrombectomy cases at our high-volume stroke center. Failure to recanalize the site of large vessel occlusion was the most common reason for persistent TICI 0 after attempted mechanical thrombectomy in our large series, occurring in 75% of persistent TICI 0 cases. In our series, persistent TICI 0 after mechanical thrombectomy had a high mortality rate, nearly 50%.

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E-125

SHORT-TERM IN-HOSPITAL OUTCOMES OF THROMBOLYSIS FOR ACUTE ISCHEMIC STROKE PATIENTS WITH NON-PRIMARY BRAIN TUMORS AND DEFICIENCY ANEMIAS

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Background Intravenous thrombolysis remains an underutilized treatment for acute ischemic stroke (AIS) due to several relative and absolute contraindications. Previous studies have found similar outcomes after thrombolysis between AIS patients with benign brain tumors and AIS patients without. This study aims to investigate short-term outcomes of thrombolytic treatment for the greater majority of AIS patients who have no history of primary brain tumors, particularly those with deficiency anemias.

Methods This retrospective cohort study utilized data from the 2012–2015Q3 Nationwide Inpatient Sample (NIS). ICD-9 codes identified adult patients (ages 18+) who suffered acute ischemic stroke and received intravenous thrombolysis, and then further isolated patients diagnosed with anemia. Data for patients who were missing important clinical identifiers (age, gender, race, mortality), did not receive IV thrombolysis, and had primary brain tumors (benign or malignant) were excluded. Data analyses assessed hospital mortality rate, length of stay (LOS), inpatient charges, and average age of admission.

Results Of the 24,692 encounters with AIS patients treated with thrombolysis and had no history of primary brain tumors, 3,276 were diagnosed with anemia.

- Mean mortality rate was significantly increased (8.2% anemia vs. 6.7% no anemia, $p = 0.002$).
- Mean LOS was significantly longer (8.11 days anemia vs. 6.07 days no anemia, $p < 0.0001$).
- Average total charges were significantly increased (\$109,278.95 anemia vs. \$82,529.99 no anemia, $p < 0.0001$).
- Average age at admission was significantly older (69.38 years anemia vs. 66.69 years no anemia, $p < 0.0001$).

Conclusion This study aims to inform physicians to better manage AIS patients receiving IV thrombolysis with anemia and no history of primary brain tumors. These patients experience higher mortality rate, longer LOS, increased total hospital charges, and older age at admission than those without anemia. These findings suggest that placing clinical focus on the coexisting deficiency anemia before administering IV thrombolysis for AIS may be critical for improving short-term in-hospital outcomes. Future research should aim to investigate different thrombolytic agents to determine the most optimal choice for patients with anemia.

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