mRS ≤ 2 at three months was seen in 20% of the patients. On univariate analysis extravasation was significantly higher in PC compared to anterior circulation (AC) (9% vs 4%, $p < 0.01$) as well as post-procedural sICH (13% vs. 4%, $p = 0.01$); vessel recanalization (TICI $\geq 2b$) was significantly lower in PC compared to AC (70% vs 90%, $p < 0.01$); mortality rate was significantly higher in patients with PC compared to AC (38% vs 9%, $p < 0.01$). On multivariate analysis AC had a significantly shorter LOS by about three days, compared to PC (coef: -3.04, 95%CI: -6.05 to -0.14, $p < 0.05$). There was no difference in odds of achieving a good TICI score. The AC group also had almost four times greater odds of having a good mRS (OR: 3.69, 95%CI: 1.06–12.8, $p < 0.05$). They also had significantly lower odds of mortality, by around eighty-eight percent (OR: 0.12, 95%CI: 0.05–0.31, $p < 0.01$).

Conclusions MT is a safe and efficacious first-line therapy for PC strokes. PC-MT provides a high rate of recanalization without procedural complications. Improvement in functional outcome remains low, and mortality remains high, but with a much better outcome than leaving the disease untreated.

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E-105 PREDICTORS OF EXCELLENT OUTCOMES POST THROMBECTOMY IN LARGE VESSEL OCCLUSION WITH MILD STROKES

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Background As the randomized controlled trials excluded the patients with emergent large vessel occlusion (ELVO) strokes with low NIHSS < 6 , the efficacy and safety of mechanical thrombectomy (MT) in this cohort is lacking. We sought to explore the predictors of excellent outcomes after MT in this international multicenter study.

Methods Stroke patients with ELVO and NIHSS < 6 treated with MT were identified from 16 high volume endovascular stroke centers over a 4 year period (2013–2017). Predictors of excellent outcomes post MT were evaluated. Baseline demographic, clinical and procedural variables were obtained.

Successful recanalization was defined as mTICI 2b and 3. Excellent outcomes are defined as modified Rankin Stroke (mRS) scale of 0–1 at 3 months.

Results Total of 146 patients with low NIHSS ELVO were included in the study. Of those, 95 (65%) patients (48% male, 71% Caucasians, mean NIHSS 3.6 ± 1.3) had excellent outcome (mRS 0–1), while remaining 51 (35%) patients (57% male, 72% Caucasians, mean NIHSS 3.8 ± 1.4) had poor outcome (mRS 2–6). The patients who had excellent outcome had lower age at presentation [years, mean (SD) 61.6 ± 17.2 vs. 68.9 ± 18.6 ; $p: 0.012$], higher rates of successful recanalization [91.2% vs. 74%; $p: 0.012$], and shorter groin puncture to recanalization time [minutes, mean (SD): 43.4 ± 27.3 vs. 60.4 ± 41.5 , $p = 0.008$] compared to poor outcome group. The mean baseline ASPECTS tended to higher in excellent outcome group (9.3 ± 1.0 vs. 8.9 ± 1.3 , $p = 0.08$). In multivariable analyses after adjustment for potential confounders, lower age (OR: 0.96, 95% CI 0.93–0.99, $p = 0.034$), shorter groin puncture to recanalization time (OR: 0.97, 95% CI 0.96–0.99, $p = 0.003$), and successful recanalization (OR: 11.2, 95% CI 1.5–80.4, $p = 0.016$) were independent predictors of excellent outcome at 3 months.

Conclusions Our retrospective multi-center study demonstrates that lower age, shorter groin puncture to recanalization time and successful recanalization were independent predictors of excellent outcomes post MT in ELVO patients with NIHSS < 6 .

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E-106 OUTCOME OF MECHANICAL THROMBECTOMY WHEN IV THROMBOLYSIS IS NOT ELIGIBLE

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Introduction Mechanical thrombectomy (MT) after intravenous thrombolysis (IVT) is recommended in acute ischemic stroke (AIS) patients with large artery occlusion (LAO). But in cases of ineligible for IVT, MT is the only option. The aim of this study is to evaluate the efficacy and outcome of MT in case of ineligible for IVT.

Method Retrospective analysis was performed in consecutive patients treated between January 2016 and November 2018 for AIS with LAO. Patient demographic data were collected and clinical outcome, procedure details and complication rate were compared.

Results During the period, 80 patients were visited within 4.5 hours from onset, but only 31 underwent MT alone due to contraindication (MT group). And 49 underwent MT combined IVT (MTIVT group). There was no significant

difference in demographics and complication (distal emboli, mortality rate, symptomatic intracranial hemorrhage). The mean time from onset to groin puncture, successful reperfusion rate (defined thrombolysis in cerebral infarction 2b/3) and favorable functional outcome (determined by modified Rankin Scale score 0–2 at 90 days) also showed no significant statistically difference. But MT group had a significantly shorter mean procedure time (45.84 vs. 76.06 min; $p = 0.001$) and hospital stay (11.53 vs. 15.0 day; $p = 0.042$), and a lower 1-day NIHSS score (6.35 vs 10.88; $p = 0.012$).

Conclusion In ineligible patient for IVT, MT alone isn't inferior to MT combined with IVT.

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E-107 SHORT-TERM IN-HOSPITAL OUTCOMES OF THROMBOLYSIS FOR ACUTE ISCHEMIC STROKE PATIENTS WITH NON-PRIMARY BRAIN TUMORS AND HYPERTENSION

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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 hypertension (HTN).

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 HTN. 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, 15,219 were diagnosed with HTN.

- Mean mortality rate was significantly decreased (6.3% HTN vs. 8.1% no HTN, $p < 0.0001$).
- Mean LOS was significantly shorter (5.90 days HTN vs. 7.05 days no HTN, $p < 0.0001$).
- Average total charges were significantly decreased (\$81,467.75 HTN vs. \$93,538.04 no HTN, $p < 0.0001$).
- Average age at admission was significantly older (67.73 years HTN vs. 65.95 years no HTN, $p < 0.0001$).

Conclusion This study aims to inform physicians to better manage acute ischemic stroke patients receiving IV thrombolysis with hypertension and no history of primary brain tumors. These patients experience lower mortality rate, shorter LOS, decreased total hospital charges, and older age at admission than those without HTN. The mortality rate and LOS could be explained by a wider range of care provided from an interdisciplinary healthcare team, as opposed to simple post-op observational care. Future research should aim to delineate the differences in approach to determine which aspects improve outcomes for AIS patients with hypertension who receive intravenous thrombolysis.

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E-108 INCIDENCE OF *IN-SITU* THROMBOSIS IN ACUTE LARGE VESSEL OCCLUSION: REVIEW OF 168 THROMBECTOMY PATIENTS

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Introduction Acute large vessel occlusion (LVO) presenting with stroke symptoms may occur as a result of embolic occlusion, *in-situ* thrombosis of intracranial atherosclerotic stenosis or intracranial arterial dissection, vasculopathy, or other etiologies. The literature reflects variation in the incidence of these pathologies depending on geography, heredity, smoking history, as well as others factors.

Abstract E-108 Figure 1