isolated patients diagnosed with PVD. 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, 4130 were diagnosed with PVD.

- Mean mortality rate was significantly increased (9.8% PVD vs. 6.7% no PVD, $p < 0.0001$).
- Mean LOS was significantly longer (7.35 days PVD vs. 6.26 days no PVD, $p < 0.0001$).
- Average total charges were significantly increased (\$101,115.04 PVD vs. \$84,908.15 no PVD, $p < 0.0001$).
- Average age at admission was significantly older (69.56 years PVD vs. 66.84 years no PVD, $p < 0.0001$).

Conclusion This study aims to inform physicians to better manage AIS patients receiving IV thrombolysis with PVD 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 PVD. These findings suggest that placing clinical focus on the coexisting condition of PVD 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 peripheral vascular disease.

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E-144 HIGH CLOT RED BLOOD CELL CONTENT IS ASSOCIATED WITH FIRST PASS SUCCESS IN MECHANICAL THROMBECTOMY

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Mechanical Thrombectomy has been associated with improved neurological outcome in large vessel occlusion (LVO) acute ischemic stroke (AIS) patients. To better understand the relationship of LVO clot composition with vessel recanalization, we analyzed individual clots from 94 retrieval passes in 43 AIS patients (65.4±12.7 years, 17 (39.5%) female) who underwent intra-arterial mechanical thrombectomy procedures over a 2-year period. Rates of successful vessel recanalization (TICI 2B - 3) for each trial and final result were analyzed. Clot composition was analyzed histologically, and the area occupied primarily by red blood cells (RBC), fibrin, or mixed was quantified. Fibrin (44%) occupied the greatest area in retrieved clots, followed by mixed type (34%) and RBCs (22%). Clot composition was compared to recanalization success, first pass efficacy, patient comorbidities, devices or technique used, and carotid tortuosity score. In 43 patients, there were 94 passes (mean 2.14, range 1–6), 20 patients (47%) had first pass successful revascularization, 41 (95%) achieved

successful revascularization, and 19 (48%) had a good outcome at 3 months (mRS 0–2). In the univariate analysis, first pass efficacy was associated with RBC composition and Atrial Fibrillation but not with fibrin composition, mixed composition, type of first pass technique employed, distal emboli, good outcome, or carotid tortuosity score. In the multivariate analysis, first pass efficacy was significantly correlated with RBC composition ($p = .05$) but not with atrial fibrillation ($p = 0.07$) or other factors. Dense MCA sign on initial CT was correlated with mixed clot composition ($p = 0.025$). RBC clot composition is associated with first pass efficacy in patients undergoing mechanical thrombectomy for LVO.

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E-145 SASKATCHEWAN EXPERIENCE WITH MECHANICAL THROMBECTOMY UNDER GENERAL ANAESTHESIA

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Background While recent clinical trials have demonstrated immense efficacy of mechanical thrombectomy in the setting of acute stroke; there remains debate over the relative safety in performing this procedure under general anesthesia (GA). Recent RCT and meta-analyses have not provided a definitive answer to this question. With the reorganization of stroke systems of care, as a result of the Saskatchewan Acute Stroke Pathway, all patients presenting with LVO are assessed and endovascular thrombectomy is performed routinely under GA. We reviewed data from our pathway to add to the data regarding safety of thrombectomy under GA.

Methods Data was retrospectively reviewed on 154 consecutive LVO in 2016–2018 at the only Comprehensive stroke center in Saskatchewan. All patients undergoing MT were placed under GA for the procedure. Pretreatment National Institutes of Health stroke scale (NIHSS), location of LVO and ASPECTS score were documented. Post-thrombectomy TICI scores, time to revascularization, and 90-day outcomes, both NIHSS and mRS, were recorded.

Results Of 154 LVO, 147 went on to have mechanical thrombectomy (MT). 65 were right anterior circulation, 70 were left anterior circulation and 11 were posterior circulation. Of 135 anterior circulation strokes, 69 (51.1%), 58 (42.9%) and 8 (5.7%) had good, moderate and poor collateral circulation respectively, and the average pre-MT ASPECTS was 8.2. The average pre-MT NIHSS was 13.4. The average time from groin puncture to revascularization was 48.7 min. A total of 133/147 (90.4%) achieved thrombolysis in cerebral infarction (TICI) perfusion scale grade of 2b/3 after recanalization. On follow-up, 70/147 and 90/147 had documented 90-day National Institutes of Health stroke scale (NIHSS) (average = 2.4) and 90-day modified Rankin score (mRS) (average = 2.2). Overall mortality was 29/147 (19.7%).