Conclusion This is the first ever descriptive study evaluating outcomes in NA patients undergoing MT. Prevalence of vascular risk factors in NA was noticeably higher compared to the comparison group. Our retrospective study showed that Native American patients similar functional and neurological outcomes for thrombectomy.


E-132 USING CUTTING-EDGE TECHNOLOGY TO REINFORCE BEST PRACTICE STROKE CARE

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Introduction/Purpose There continues to be a lack of standard data management tools for neurovascular service lines and stroke programs. Many hospitals use ‘home-grown’ spreadsheets or upload to various registries which are designed more toward research initiatives than daily operations.

Installation of a dedicated Neurovascular Information System (NVIS) will result in improved efficiency, quality, and financial performance in operating a stroke program and/or neurovascular service line.

Materials and methods A small rural hospital in Pennsylvania installed a NVIS for daily use within its Primary Stroke Center. The NVIS was designed to support data entry and capture clinical data for process improvement, care standardization, and support stroke program growth. A commitment to move from retrospective data collection to near real-time data collection and analysis capitalized on the ability to adjust care for the next patient. The data from the NVIS was used to amplify opportunities for quality improvement and identify flaws in policies/procedures, care standards, and other program components. An effort to reinforce best practice standards was initiated based on findings from the data.

Results The stroke care team used the data from the NVIS to identify and quickly and efficiently fix issues real-time versus addressing any problems months later after waiting for formal data registry reports. The following results were realized: an increased swallow screen compliance, increased use of the NIH assessment by ED physicians and front-line staff, an increase in t-PA utilization rate, an increase in the number of patients receiving t-PA within 60 minutes of arrival, an increase in the number of discharges to home, and an increase in the number of patients arriving by ambulance. Additionally, the chart abstraction times were decreased.

Conclusion Utilization of a dedicated NVIS reversed the narrative related to stroke program management and allowed program leaders to use this clinical infrastructure and accurate data to drive practice improvement and assist on-site staff to more effectively manage the care continuum from pre-admission through post-discharge.

Disclosures S. Lang: None.

E-133 ADHERENCE TO ENDOVASCULAR TREATMENT GUIDELINES IN ACUTE ISCHEMIC STROKE: INSIGHTS FROM AN INTERNATIONAL MULTIDISCIPLINARY SURVEY

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Background Several randomized controlled trials have provided level IA evidence for the efficiency of endovascular therapy in acute ischemic stroke. We assessed the adherence to current endovascular treatment guidelines in acute ischemic stroke according to geographical region, hospital setting, medical specialty and physicians’ characteristics.

Methods An international cross-sectional survey of stroke physicians and interventionalists was conducted to understand their current practice and therapy decision-making in acute stroke. Participants were randomly assigned 10 cases out of a pool of 22 scenarios and asked how they would treat the patient. Adherence to the 2018 Guidelines for the Early Management of Patients with Acute Ischemic Stroke From the American Stroke Association was analyzed, and subgroup analyses were performed for different geographical regions, hospital settings, medical subspecialty, physician experience and age.

Results 607 physicians (53.6% neurologists, 28.7% interventionalists, 13.3% neurosurgeons, 4.7% other) from 38 countries participated in this survey. Overall guideline adherence in cases based on level of evidence 1A and 2B was 86.1% and 66.6%. For level 1A case scenarios, adherence differed...
significantly across different specialties (ranging from 90.4% to 56.5%, p<0.001) and different geographic regions (ranging from 89.9% to 72.0%, p<0.001). Physicians with a higher adherence to treatment guidelines performed significantly more EVT cases per year than those with a lower adherence (median 30, IQR 35 vs. 15, IQR 25, p<0.001). In level 2B scenarios, the overall decision rate in favor of EVT was lower (66.6%) and the differences in decision rates between different specialties (73.7% - 40%, p<0.001) and regions (73.9% - 47.1%, p<0.001) were more pronounced. Again, physicians opting for EVT performed significantly more EVTs per year (median 30, IQR 30 vs. 20, IQR 30, p<0.001).

Conclusion The high overall adherence to current endovascular stroke treatment guidelines suggests strong consensus within the neurointerventional community. Physician caseload played an important role in our sample.


E-134 IN-HOSPITAL COMPLICATIONS OF THROMBOLYTIC TREATMENT FOR ACUTE ISCHEMIC STROKE IN DIALYSIS-DEPENDENT PATIENTS

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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 investigated outcomes for the majority of AIS patients receiving thrombolysis without including the subset of renal failure patients requiring dialysis. This study aims to investigate short-term outcomes of thrombolytic treatment for dialysis-dependent patients who suffered in-hospital complications.

Methods This retrospective cohort study utilized data from the 2012–2015Q3 Nationwide Inpatient Sample (NIS). ICD-9 codes identified adult patients (ages 18+) who received thrombolytic treatment for AIS while on dialysis for renal failure, and then further isolated patients diagnosed with in-hospital complications. Complications include intracerebral hemorrhage (ICH), pneumonia, urinary tract infection (UTI), sepsis, deep venous thrombosis (DVT), and pulmonary embolism (PE). Data for patients who were missing important clinical identifiers (age, gender, race, mortality) and did not receive IV thrombolysis or dialysis were excluded. Data analyses assessed hospital mortality rate, length of stay (LOS), inpatient charges, and average age of admission.

Results Of the 5,745 encounters with AIS patients treated with thrombolysis while on dialysis for renal failure, 189 dialysis-dependent patients had in-hospital complications. These patients experienced:

- Lower rate of ICH (1.1% DD vs. 4.6% no DD, p<0.0001).
- Higher rate of pneumonia (5.4% DD vs. 2.9% no DD, p<0.0001).
- Lower rate of UTI (2.5% DD vs. 4.2% no DD, p<0.0001).
- Higher rate of sepsis (11.4% DD vs. 1.9% no DD, p<0.0001).
- Higher rate of DVT (15.6% DD vs. 3.2% no DD, p = 0.004).
- No significant difference in rate of PE (3.3% DD vs. 3.3% no DD).

Conclusion This study aims to inform physicians to better manage dialysis-dependent renal failure patients receiving IV thrombolysis for AIS. These patients experience lower rates of ICH and UTI, and higher rates of pneumonia, sepsis, and DVT. These findings suggest that placing clinical focus on pneumonia, sepsis, and/or DVT prevention before administering IV thrombolysis may be critical for improving short-term in-hospital outcomes for AIS. Future research should aim to investigate different thrombolytic agents to determine the optimal choice for dialysis-dependent patients with pneumonia, sepsis, and DVT, as well as delineate differences in approaches to achieve best outcomes for dialysis-dependent renal failure patients receiving IV thrombolysis.


E-135 MECHANICAL THROMBECTOMY FOR SMALL AND MEDIUM VESSEL OCCLUSION: A RURAL EXPERIENCE

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Recent clinical trials have established that treatment of acute ischemic stroke secondary to large vessel occlusion with mechanical thrombectomy leads to improved revascularization and functional outcomes. Thus, the guidelines in treatment of ischemic stroke have been updated to reflect the results found in current literature. However, thrombectomy of small and medium vessel occlusions are a more controversial topic. The aim of the present study is to evaluate the outcomes of patients treated with mechanical thrombectomy for acute ischemic stroke secondary to more distal vessel occlusion and to highlight process times and