left-sided stroke patients, the TICI scores (R=+0.643), WAB scores (spontaneous speech R=+0.642, repetition R=+0.630, object naming R=+0.681) and mRS scores at discharge (R=−0.693) correlated with arcuate and superior longitudinal fasciculi tract counts (all p<0.05). The inferior longitudinal fasciculus tract count also correlated with other WAB scores (functional content R=+0.658, sequential commands R=+0.665) (all p<0.05). Except for discharge mRS correlating with the arcuate and superior longitudinal fasciculi (R=−0.826, p=0.003), the remaining clinical measures were not correlated with right-sided stroke patients’ arcuate, superior longitudinal, and inferior longitudinal fasciculi.

Conclusion For left-sided MCA occlusions, TICI scores were well correlated with increased arcuate and superior longitudinal fasciculi tract counts after MT. After recanalization of the left MCA, increased number of arcuate, superior longitudinal, and inferior longitudinal fasciculi tracts is associated with improved speech function measured by the WAB test. These two findings were not apparent in right-sided MCA occlusions, perhaps due to the minimal role of the right cerebral hemisphere in speech. Tract count analysis of the arcuate, superior longitudinal, and inferior longitudinal fasciculi for either right- or left-MCA occlusions correlated with discharge mRS, indicating that a higher number of tracts measured within 4 days of MT could act as a proxy for patient’s overall independence status by discharge. While larger, prospective studies are needed to confirm these findings, automated tractography could yield novel avenues into patient screening during post-operative recovery of speech function.


E-236 COMPARISON OF PIPELINE VS SURPASS FLOW DIVERTER: A SINGLE CENTER EXPERIENCE

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Background Multiple flow diversion embolization devices have currently been used to treat side wall intracranial aneurysms. However, there are no robust head-to-head comparison studies of these devices in clinical practice. We sought to compare two major flow diverters used, Pipeline vs Surpass in operative and post-operative settings.

Method We retrospectively analyzed our procedural database for use of all flow diverters including pipeline vs surpass flow diverters. Baseline demographic variables were collected and compared between each group. In addition, safety variables such as procedural or post-procedural complications were compared between the two groups.

Results A total (=n) of 221 were included in this retrospective chart review. 179 (81%) were pipeline cases. Baseline smoking status was similar between both groups. Majority were unruptured aneurysms and only close to a quarter in each of the groups. The width (in mm) was significantly smaller in pipeline cases [3.9 mm (2.5 - 7) vs surpass [6.1 mm (3.9 - 9.3)]. p value of 0.008). Safety outcomes including intracranial hemorrhage (0% vs 0%), stroke [2 (1%) vs 2 (4%)], seizure [1 (0.5%) vs 1 (2%)], intracranial hypertension [4 (2%) vs 0%], vasospasm [3 (2%) vs 0%], vessel perforation [0% vs 0%], thrombus formation [0% vs 1 (2%)], aneurysm rupture (0% vs 0%) was comparable between pipeline vs surpass flow diverter groups and with no statistical significance.

Conclusions In our single-center retrospective experience in the last 5 years, the Pipeline and Surpass were comparable except that the Surpass flow diverter cases tended to have a higher baseline aneurysm width compared to Pipeline. However, the procedural outcomes and complication rates were comparable between both groups. Long-term and follow-up data to be evaluated for efficacy outcomes assessment.

Disclosures A. Pandhi: None. A. Kashkoush: None. M. Bain: None.

E-237 A 911 CONTINUATION OF CARE PROTOCOL REDUCES DOOR IN, DOOR OUT TIME FOR TRANSFER PATIENTS WITH EMERGENT LARGE VESSEL OCCLUSION


Introduction/Background Rapid reperfusion with mechanical thrombectomy (MT) for emergent large vessel occlusion leads to significant reduction in morbidity and mortality. Time from symptom onset to reperfusion is the main modifiable predictor of functional independence, which decreases by 10–15% for each 30 minutes of delay. In the Kaiser Permanente Southern California (KPSC) hospital system, patient transfers from non-interventional to interventional facilities typically utilize the Emergency Tertiary Assistance Program (ETAP), a centralized group of nurses who coordinate physician communication and arrange for ambulance pickup. However, in San Bernardino County (CA), 911 continuation of care (COC) is an alternative method available for transferring MT patients. The COC process allows the sending hospital to call 911 and the nearest ambulance will respond to transport the patient to the thrombectomy center. We compared door in, door out (DIDO) times for patients transferred via the COC protocol versus patients transferred by the standard ETAP protocol to determine whether transfer protocol would impact DIDO time.

Methods

We performed a retrospective analysis of consecutive stroke patients transferred from two primary stroke centers for MT between January 1, 2021 and January 30, 2022. Patients were identified from stroke coordinator logs. Clinical records were reviewed and demographic and clinical information were extracted. Patients were divided into two groups, those transferred via the COC protocol and those transferred by the standard ETAP system. Demographic and clinical variables were compared using t-test for continuous variables and chi-square for categorical variables. The primary outcome was DIDO time.

Results Thirty-two patients were identified. Of these, 12 (38%) were transferred by COC and 20 (63%) were transferred by ETAP. There was no significant difference in age (p = 0.69), gender (p = 0.92), or presenting NIHSS (p = 0.47). Rates of thrombolytic started at the sending hospital were 42% (5/12) in patients using COC and 55% (11/20) in patients using ETAP (p = 0.71). There was no significant difference in DIDO time between internal KPSC transfers (median 90 min, N=6) and transfers out of system (median