treatment. Compared to recent Y-SAC series, which reported rates of ischemia or hemorrhage from 0% (n = 15) to 16.7% (n = 6), our cohort demonstrates low (1 subject; 4.76%) rates of major complications. Furthermore, that patient presented after trauma postoperatively, which may have played a role in this complication. Operative outcomes are comparable with current literature, which report long-term adequate occlusion ranging from 80% (n = 15) to 100% (n = 18), compared to 86.7% in the present study. Angiographic follow-up is not yet available in three of our patients, and three others were lost to follow-up or died of unrelated causes.

Conclusion In this cohort, we find that staged Y-SAC is safe and effective in the treatment of unruptured WNBAs, demonstrating low rates of major complications and favorable rates of long-term occlusion. Most notably, the absence of any ruptures or hemorrhagic complications demonstrates that a staged approach may increase the feasibility of Y-SAC by providing a more stable construct through which treatment is completed.

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E-048 ANTIITHROMBOTICS FOR EMERGENT STENTING IN ACUTE STROKE

1S Lahoti, 2K Limaye, 3K Zevvalos, 4K Dlouhy, 5E Hayakawa, 6D Hasan, 7I Ortega, 8C Derdeyn, 9Radiology, Neurology and Neurosurgery, University of Iowa, Iowa City, IA; 10Neurology, Indiana University, Indianapolis, IN; 11Neurosurgery, University of Iowa, Iowa City, IA; 12Radiology, University of Iowa, Iowa City, IA; 13Neurology, University of Iowa, Iowa City, IA; 14Neurosurgery, Duke University, Durham, NC

Background Prospective studies have indicated that stenting of extracranial internal carotid artery with thrombectomy of intracranial occlusion has better outcome compared to other approaches for treatment of stroke due to tandem occlusion. However, there is dearth of data on use of anti-thrombotics for stents deployed in emergent setting with no prior adequate antiplatelet therapy. Stent occlusion and intracranial hemorrhage are two major competing risks for use of anti-thrombotic therapy. We prospectively studied use of tirofiban to balance the two risks in patients who required stent deployment for treatment of acute ischemic stroke. Tirofiban is a reversible GPIIb/IIa receptor antagonist with rapid onset and offset of action which provides for immediate antiplatelet activity to prevent stent occlusion that can be reversed relatively quickly in case of hemorrhage or need for hemicraniectomy.

Methods Consecutive patients of acute ischemic stroke treated at University of Iowa Hospital from November 2020 with an extracranial or intracranial stent were enrolled in the study. Tirofiban continuous infusion, without bolus dose at a rate of 0.1 mcg/kg/min was started shortly prior to deployment of the stent. Head imaging, preferably MRI was obtained as soon as possible after the procedure. Dual oral antiplatelet therapy was started if there was no evidence of intracranial bleed or large infarct which could require hemicraniectomy. Alternatively, tirofiban was continued until an hour before hemicraniectomy or end of ‘hemicraniectomy watch’ period. Follow-up evaluation was done in the clinic after 3 months with non-invasive vessel imaging.

Results Twenty patients met the study criteria. Seventeen had extracranial and three had intracranial stent placement. Seven patients had received intravenous thrombolytic therapy with alteplase. Stent occlusion occurred in two out of twenty patients (10%) while symptomatic intracranial hemorrhage occurred in one patient (5%). There were confounding factors in both cases of stent occlusion, chronic carotid occlusion in one and incomplete stent expansion in the other. Intracranial hemorrhage occurred in one patient, 36 hours after the procedure and 30 hours after tirofiban was stopped and oral dual antiplatelet therapy was started. Modified Rankin Scale at three months was available for 15 patients, 6/15 (40%) had score of ≤2 while 9/20 (45%) had score ≤2 at discharge. Two patients died and one pursued hospice care due to causes unrelated to stroke. Intravenous thrombolytic therapy or prior antithrombotic use had no association with stent occlusion. Single patient who had symptomatic intracranial hemorrhage did receive tPA. All three intracranial stents were patent and had no complication. None of the twenty patients had any extracranial hemorrhage.

Conclusion Tirofiban continuous infusion is a safe and possibly effective strategy for emergent stenting in acute ischemic stroke.

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E-049 REDUCED SUPPLY COST FOR MECHANICAL THROMBECTOMY IN LARGE VESSEL OCCLUSIONS WITH A BUNDLING COST PROGRAM FOR INSTRUMENTATION

J Catapano, 5S Koester, 5A Naik, 6E Winkler, 6V Srinivasan, 6S Desai, 7F Albuquerque, 8A Ducruet, 9A JadHAV, Neurosurgery, BNI, Phoenix, AZ

Introduction The societal and economic burdens of stroke are significant. Bundling cost programs have previously shown to be effective in reducing cost for stroke care. Our aim was to assess the efficacy of bundling costs for instruments used in mechanical thrombectomy at our single institution.

Methods A retrospective review of all patients who underwent a mechanical thrombectomy at a single comprehensive stroke center over a 5-month period from 11/1/21 to 3/26/22 was performed. All patients with cost bundling instrumentation were analyzed for cost of the procedure, as well as al carte cost without the bundling. An independent t-test was performed comparing the average cost. A p-value <0.05 was defined as significant.

Results A total of 26 patients were included in the analysis. The average total cost using a la carte purchasing was $192,619 whereas bundling total cost was $173,338, accounting for a total cost savings of $19,281. The average a la carte cost per patient was significantly greater than the average bundle cost per patient ($7,408 (SD 3474.97) vs $6,667 (SD 3162.09), p = <0.0001). The average cost savings per patient was therefore $742 (SD 386.39, range = $70 - $1575).

Conclusion Purchasing devices used for stroke using a bundled model could result in significant cost savings to the hospital, potentially minimizing the annual health care costs of stroke while maintaining therapeutic efficacy. Future studies should assess the feasibility and effectiveness of bundling methods for acute ischemic stroke supplies to determine optimal pricing