Abstracts

challenging, multimodal approach with transdural ONYX embolization, transvenous embolization or even SRS can be considered. Further assessment of natural history of patients with near occlusion is warranted.

Disclosures T. Shigematsu: None. J. Fifi: None. A. Berenstein: None.

0-026 CLEARANCE OF CHRONIC SUBDURAL HEMATOMAS FOLLOWING MIDDLE MENINGEAL ARTERY EMBOLIZATION

J Catapano*, A Ducruet, K Rumalla, C Nguyen, V Srinivasan, C Rutledge, T Cole, J Baranoski, M Lawton, A Jadhav, F Albuquerque. *Neurosurgery, BNI, Phoenix, AZ*

10.1136/neurintsurg-2021-SNIS.26

Background Chronic subdural hematomas (cSDHs) are one of the most common neurosurgical pathologies encountered. Recently, middle meningeal artery (MMA) embolization has emerged as an alternative to surgery with the potential for reduction in treatment failures. However, existing literature does not address the rates of cSDH resolution following MMA embolization nor variables associated with rapid clearance. The present study analyses clearance rates of cSDHs following MMA embolization.

Methods All patients who underwent a MMA embolization for a cSDH at a single center from 1/1/2018 to 12/31/2020 were retrospectively analyzed. Patients without sufficient follow-up scans of at least 20 days post-embolization were excluded. Patient characteristics, demographics, and technical details were examined. Outcomes analyzed included resolution and/or near complete resolution (defined as <5 mm on axial head computed tomography) at 30-, 90-, and 180-days following embolization. An additional univariate analysis for factors associated with rapid clearance (defined as a rate of clearance >0.5 mm/day) was performed. A subsequent stepwise multivariable logistic regression analysis for variables predictive of rapid clearance was performed for all factors with a p-value <0.2 on univariate analysis.

Results During the study period, 76 patients underwent a MMA embolization. 10 patients were excluded. In the 66 patients, there were a total of 84 cSDHs treated. The mean hematoma size prior to embolization was 16.9 mm (sD 4.8). Both anterior and posterior branches were embolized in 61 (72%) cSDHs and distal embolization was achieved in 57 (68%) hemorrhages. There was one complication (1%) reported (a CVA) and 3 (4%) cSDHs required surgical rescue. There was a significant difference in mean cSDH size at 30-

Abstract 0-026 Table 1 Characteristics of chronic subdural hematoma patients treated with middle meningeal artery embolization

Characteristic	N=66 (%)
Age (yr), mean (SD)	70 ±11
Male sex	51 (77)
GCS Presentation	14 ±2
GCS Discharge	14 ±2
Charlson Comorbidity Index	4.7 ±2
Previous trauma	42 (64)
Preoperative Anticoagulant or Antiplatelet	32 (48)
Bilateral	18 (21)

Abstract 0-026 Table 2 Characteristics and outcomes of Chronic Subdural hematomas treated by middle meningeal artery embolization

Characteristic	N=84 (%)
Hematoma Size (mm)	16.9 ±/ 4.8
Combined with Surgery	31 (37)
Radial*	65 (77)
Embolysate	
Onyx	66 (79)
Particles and/or coils	13 (16)
nBCA	5 (6)
Both Anterior and Posterior Branches Embolized	61 (72)
Distal Penetration	57 (68)
Complication	1 (1)
Surgical Rescue	3 (4)

*One patient required crossover from radial to femoral due to inability to catheterize left internal carotid artery.

Abstract 0-026 Table 3 Average hematoma size (mm) and percent of patients with complete and or near complete resolution at 30-, 90-, and 180-days post embolization

Variable	30 Day (N=84)	90 Day (N=72)	180 Day (N=73)	P-Value
Size	8.8 ± 4.3	3.4 ± 3.0	1 ± 1.7	<0.001
Complete/Near Complete Resolution	15 (16)	45 (63)	67 (92)	<0.001

(8.8 mm, sD 4.3), 90- (3.4 mm, sD 3.0), and 180-days (1, sD 1.7) post-embolization (p<0.001). A greater percentage of cSDHs were found to have complete and/or near complete resolution at 180-days (92%) compared to 90- (63%) and 30-days (16%) post-embolization (p<0.001). On univariate analysis for factors associated with rapid clearance rates; bilateral embolization, female gender, distal penetration, and combined anterior and posterior embolization were associated with p-values <0.2. On stepwise multivariable logistic regression analysis, only distal penetration was found to be associated with rapid rates of clearance (OR 3.9, 95% CI 1.4-11.1, p=0.011).

Conclusion The majority of cSDHs undergoing MMA embolization will have complete and/or near complete resolution by 90-days post-procedure. Furthermore, distal MMA penetration may be associated with more rapid clearance of hematoma.

Disclosures J. Catapano: None. A. Ducruet: None. K. Rumalla: None. C. Nguyen: None. V. Srinivasan: None. C. Rutledge: None. T. Cole: None. J. Baranoski: None. M. Lawton: None. A. Jadhav: None. F. Albuquerque: None.

0-027 EMERGENT VERSUS DELAYED CAROTID ARTERY STENTING FOLLOWING INTRACRANIAL THROMBECTOMY FOR ACUTE STROKE WITH TANDEM OCCLUSION

¹A Garg*, ¹C Zevallos, ¹D Quispe Orozco, ¹A Mendez Ruiz, ¹M Farooqui, ²O Zaidat, ¹S Ortega. ¹University of Iowa Hospitals and Clinics, Iowa City, IA; ²St. Vincent Medical Center, Toledo, OH

10.1136/neurintsurg-2021-SNIS.27

Introduction At present, there is lack of consensus about the optimal timing of carotid artery stenting (CAS) following