



Abstract E-050 Figure 1

$p=0.1065$). Complete recanalization was observed in 67.9% of all cases and favorable clinical outcomes was seen in 74.7% of all cases treated endovascularly. Procedural complications, including post-procedural hemorrhage and vessel perforations, occurred in 11.0% of cases. Preprocedural intracerebral hemorrhage (ICH) was associated with poorer clinical outcomes (OR 0.20, 95% CI 0.05 - 0.73, $p=0.014$) despite no significant difference in procedural recanalization success (OR 0.88, 95% CI 0.05 - 0.73, $p=0.6878$). Presence of deep sinus involvement significantly worsened clinical outcomes (OR 0.001, 95% CI 0.0001 - 0.0076, $p<0.0001$), with no significant difference in recanalization success (OR 2.72: 95% CI 0.58 - 12.67, $p=0.1999$). Figure 1 illustrates temporal trends in endovascular techniques used, with aspiration with or without stent retriever emerging as the predominant method after 2010.

Conclusions Endovascular management of CVST is promising as adjunctive or salvage therapy, with acceptable complication rates. Deep sinus involvement and preprocedural ICH are associated with poorer outcomes. Aspiration, with or without stent retriever, has emerged as the primary endovascular method for CVST revascularization. Further research is warranted to refine patient selection criteria and optimize treatment protocols.

Disclosures J. Sims: None. B. Mulpur: None. V. Inoa: None. D. Hoit: None. A. Arthur: None. N. Goyal: None.

E-051 CHRONIC SUBDURAL HEMATOMA EVACUATION AND MIDDLE MENINGEAL ARTERY EMBOLIZATION IN A SINGLE SETTING IN THE HYBRID OPERATING ROOM: A UNIQUE SINGLE CENTER EXPERIENCE

¹E Walker, ²A Castano, ²R Aponte, ²P Connolly, ²K Mueller, ²O Choudhri*. ¹University of South Carolina, Greenville School of Medicine, Greenville, SC; ²Neurosurgery, University of Pennsylvania, Philadelphia, PA

10.1136/jnis-2024-SNIS.156

Introduction As the median age of the population has gradually increased, so has the incidence of chronic subdural hematoma (cSDH), making it a common pathology encountered by neurosurgeons and neuro-interventionalists. cSDH is characterized by microvasculature bleeding; treatment requires surgical evacuation for symptom resolution but carries a hematoma recurrence risk of up to 30%. Randomized clinical trials demonstrated efficacy of a combined treatment approach that employs both surgical evacuation and adjunctive MMA embolization (MMAE) to decrease the risk of hematoma recurrence.

MMAE is performed separately from surgical evacuation due to the need for access to biplane angiography equipment. However, Khorasanizadeh et al. (2023) revealed these staged approaches are more costly and lead to prolonged hospitalizations for patients. Utilization of hybrid operating rooms may serve as a more suitable alternative to separated procedures. Hybrid suites contain interventional suite equipment alongside operating room supplies to enable both embolization and surgical evacuation in a single setting. This study assesses a single center's experience utilizing hybrid operative suites to perform MMA embolization and hematoma evacuation in succession for the treatment of symptomatic chronic subdural hematoma.

Methods Retrospective data was collected from a series of 16 consecutive patients from the University of Pennsylvania Virtua Our Lady of Lourdes Hospital between 2020 and 2024. Inclusion criteria consisted of patients who received perioperative MMA embolization followed by a craniotomy or burr hole for subacute or chronic subdural hematoma evacuation and treated within a hybrid operating suite in a single event. Descriptive statistics were employed to evaluate turnover time, exposure time to fluoroscopy ionizing radiation, patient outcomes, and complication risk.

Results 75% (12/16) of patients reported historical use of anti-platelet therapy or recent fall and presented with varying degrees of dizziness, ataxia, headache, weakness and altered mentation. A predominance of acute on chronic hematoma was observed with hematoma size variation between 10 mm to 28 mm thickness with 7 mm of average midline shift. All patients received MMA embolization using embospheres and coils via right radial access, followed by hematoma drainage. 75% (12/16) of patients received hematoma drainage via burr holes and 25% (4/16) of patients received a craniotomy in the hybrid suite. Total procedure time averaged 2.51 hours, mean fluoroscopy time was 22.16 minutes and average ionizing radiation exposure was 98849 mGycm². No procedure complications were experienced by any patient. Upon follow-up, no patients required additional treatments for SDH related recurrence.

Conclusion Hybrid operating room suites hold the potential to be the future hub of symptomatic chronic SDH care. Hybrid suites permit surgical and endovascular intervention in rapid succession for the treatment of subdural hematoma. This single setting treatment for SDH enables the provision of maximally safe, effective and time efficient care with minimal radiation exposure time.

Disclosures E. Walker: None. A. Castano: None. R. Aponte: None. P. Connolly: None. K. Mueller: None. O. Choudhri: 2; C; Balt, Microvention, Medtronic, Qapel, Siemens, EO Solutions.

E-052 MMA EMBOLIZATION WITH DILUTE N-BCA UNDER BALLOON OCCLUSION: AN EFFICIENT EMBOLIZATION TECHNIQUE

¹B Jagadeesan*, ²A Ho, ²S Bajgur, ²A Grande, ²R Tummala. ¹University of Minnesota, North Oaks, MN; ²University of Minnesota, Minneapolis, MN

10.1136/jnis-2024-SNIS.157

Introduction There is increasing evidence for the efficacy of Middle Meningeal Artery embolization (MMAE) in the prevention of chronic subdural hematoma (cSDH) recurrence. Most studies report that both the anterior and posterior