Abstract E-185

**MIDDLE MENINGEAL ARTERY EMBOLIZATION WITH N-BUTYL-2-CYANOACRYLATE (NBCA) FOR MANAGEMENT OF CHRONIC SUBDURAL HEMATOMA, A SINGLE CENTER EXPERIENCE**


10.1136/neurintsurg-2022-SNIS.297

**Introduction** Chronic subdural hematomas (CSDH) with recurrence after burr hole irrigation cause significant morbidity, especially in elderly population where prevalence is higher. Use of N-butyl-2-cyanoacrylate (NBCA) has proven to be an effective and safe therapeutic agent for embolization of middle meningeal artery. In our study we present a retrospective analysis of 20 patients who underwent MMA embolization.

**Methods** In a prospectively maintained database in a single center we retrospectively analyzed 20 patients that were admitted to our institution that were diagnosed with CSDH and underwent MMA embolization with NBCA between January 1st, 2021 and December 31st, 2021. Primary endpoint was need for surgical intervention (burr hole and irrigation). Secondary endpoint was imaging stability and/or near stability, and functional outcome (measured by the modified Rankin Scale [mRS]). For the secondary endpoint, imaging and clinical assessment done at 1 and 3 months.

**Results** A total of 20 patients that required non-emergent MMA embolization were included in our study. 70% (14) were patient that were admitted for change in mental status directly related to CSDH. These patients were ruled out to be secondary to other reversible causes of encephalopathy. Other patients, 30% (6) underwent MMA embolization as an elective procedure. Out of the 20 patients, 100% had resolution of CSDH defined by stability of hematoma on head computed tomography (CT) on the week after the procedure, 1 month, and 3 months later. As well, all patients had an mRS of ≤2 at 1 and 3 months. None of the patients included required surgical intervention with irrigation for resolution of SDH after MMA embolization.

**Conclusion** MMA embolization with NBCA is an effective and safe method for management of CSDH as has been shown in prior retrospective studies. Surgical intervention with burr hole drilling and irrigation may increase morbidity and hospital stay and may not address the primary cause of bleeding. Randomized trials will help determine if MMA embolization is safe and effective for treatment of CSDH reducing morbidity and mortality.

Disclosures A. Chatterjee: Medtronic, Microvention. A. Chatterjee: None. C. Moran: 2; C; Medtronic, Cerenovus. A. Kansagra: 2; C; Microvention, Penumbra.

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