

Frequency of ICU Specific Interventions After Middle Meningeal Artery Embolization

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Introduction

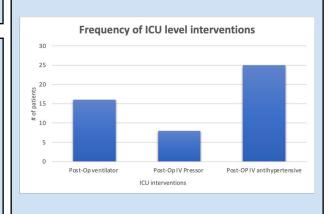
- Middle meningeal artery embolization (MMAE) is increasingly performed for the treatment of chronic subdural hematomas¹
- Some authors have described managing minimally symptomatic patients with MMAE in the outpatient setting¹
- At Valley Baptist Medical Center (Harlingen, TX) it is routine to admit patients to the neuro-intensive care unit (NICU) setting after MMAE
- Objective of this study is to analyze the frequency of ICU level intervention performed in neuro-intensive care unit after MMAE to assess possibility of outpatient management of symptoms

Method

- Consecutive series of MMA embolizations for cSDH were retrospectively reviewed from 2020-2022
- Recorded frequency of following ICU specific interventions:
 - Post-op ventilation
 - o Post-op IV vasopressor
 - o Post-op IV antihypertensive

Results

- Total of 50 MMA embolizations were performed during study period
- Average age of patients included in study was 63 years old +/- 16 years
- 34% patients did not receive any ICU level intervention
- Among the remaining who did, 32% required mechanical ventilation post procedurally
- 14% needed vasopressor
- 48% required intravenous antihypertensives to maintain systolic blood pressure within goal parameters



Conclusions

- 1. 34% of patients who underwent MMAE did not actually require ICU admission
- Most common reason for ICU intervention after MMAE was for correction of blood pressure (to maintain within specified goal)
- Research suggests that liberalization of blood pressure parameters could reduce the need for ICU utilization after MMAE
- 4. Further studies are necessary to assess possibility of outpatient management of symptoms following MMA embolization
- Assessment of various components of ICU level interventions administered to patients post-MMAE allows for better understanding on preventive measures that can be taken to reduce length of in-patient stay of future patients post procedure. This has the potential to minimize spread of nosocomial infections, especially in times of COVID-19.

References

. Entezami P, Field NC, Dalfino JC. Outpatient management of chronic expanding subdural hematomas with endovascular embolization to minimize inpatient admissions during the COVID-19 viral pandemic. *Interv Neuroradiol*. 2021;27(5):716-721. doi:10.1177/1591019921996510