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Comparison of Clinical and Radiographic Efficacy of Particles versus nBCA/Onyx in Middle Meningeal Artery Embolization for Chronic Subdural Hematoma

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Comparison of Clinical and Radiographic Efficacy of Particles versus nBCA/Onyx in Middle Meningeal Artery Embolization for Chronic Subdural Hematoma

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BACKGROUND

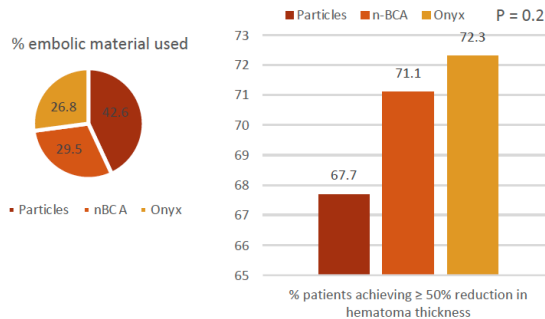
Different embolic materials are utilized in MMA embolization per operators' discretion. We aim to compare the clinical and radiographic efficacy of different embolic materials in a pooled retrospective cohort of two US centers

METHODS

- Consecutive patients undergoing MMA embolization (MMAE) for cSDH at 2 US centers (2019-2021) were included
- Radiographic outcomes were resolution of cSDH with at least 50% reduction in hematoma thickness
- Clinical outcomes were the proportion of patients requiring additional unplanned surgical intervention
- Comparison between the particles group and the liquid group which was further subdivided into the n-BCA and Onyx groups

RESULTS

- 185 patients included, total 198 MMAE procedures
- Median age: 72 years
- 27.5% females
- Median follow up imaging: 3.5 months
- There were no differences in the proportion of patients requiring additional unplanned surgery between the groups (p=0.6)
- No difference in procedural complications between the 3 embolic materials groups



CONCLUSION

MMAE for cSDH utilizing particles and liquid embolic materials (including Onyx and n-BCA) appears to have an overall equivalent safety and efficacy profiles in cSDH treatment. Further studies with larger sample sizes and longer follow-up are warranted.