

56. **MULTI-TECHNIQUE MANAGEMENT OF CHRONIC SUBDURAL HEMATOMA IN A SINGLE PATIENT: A CASE REPORT**

Tunde Olobatoke¹, Chibueze Nwanmah¹, Somtochukwu Ekwegbara¹, Temitayo Ayantayo², Oluwafemi Owagbemi², Serge Rasskazoff², Olawale Sulaiman².

¹ Fifth-year Medical student. College of Medicine University of Lagos, Lagos, Nigeria.

² MD. RNZ Neurosciences, Lagos, Nigeria.

INTRODUCTION: Chronic Subdural Hematoma (cSDH) is one of the most everyday neurosurgical conditions. Unfortunately, there is no defined gold standard technique in managing cSDH, as studies show mixed results with no consensus on the superiority of a particular method. This lack of uniformity in the treatment of cSDH makes the management choice dependent on the clinical symptomatology, surgeon's preference, and recurrence after a prior intervention. Different management approaches are available, ranging from novel medical therapy, e.g., steroids, etizolam, tranexamic acid, angiotensin-converting enzymes inhibitors (ACEIs), to minimally invasive techniques, e.g., endovascular middle meningeal artery (MMA) embolization and endoscopic treatment, to more invasive surgical approaches, e.g., twist drill craniostomy, burr hole craniostomy, and craniotomy. A component network meta-analysis by Jack et al. showed a 10.8% recurrence rate (95% CI 10.2-11.5) across 418 studies involving different management techniques. The use of a post-operative drain and MMA embolization reduced recurrence, while the risk of morbidity was equivalent across surgical treatments. We aim to present the multi-technique management approaches required to achieve clinical and radiological resolution in a cSDH patient. **THE CASE:** We report the clinical course and management of a 47-year-old male with no history of trauma who presented with sudden onset of severe headaches and brain computed tomography scan finding of bilateral cSDH. He required multiple treatment techniques, starting with bilateral twist drill craniostomies and Jackson-Pratt drain insertion with the resolution of the right collection and recurrence of the left collection. He further required the placement of two left burr hole craniostomies for drainage. However, the collection recurred. He then proceeded to have a left middle meningeal artery embolization and a left craniotomy before a clinical and radiological resolution was achieved. **CONCLUSION:** The management of cSDH is still an art and not a cookbook. Familiarity of clinicians with multiple techniques and selection based on clinical judgment is essential for improved outcomes. Appropriate patient selection for the right technique will depend on accumulating data from clinical practice and its analysis.

Key words: Chronic Subdural Hematoma; Management; Craniotomy; Recurrence. (Source: MeSH-NLM).