



A Comparison of Single burr hole with closed external drainage system vs Double burr hole with closed external drainage system in the treatment of chronic subdural hematoma – A Series of 230 Cases

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Introduction

To analyze, compare and present the effectiveness of Single burr hole with closed external drainage system vs Double burr hole with closed external drainage system in the treatment of chronic SDH

Methods

In our series, we had 286 cases of chronic SDH from June 2004 to December 2012. Single burr hole or double burr hole with subdural drain connected to closed external drainage system was done for 230 cases. This treatment was offered to patients with CT brain study showing chronic SDH, without septations, without multiple membranes and without acute clots. Remaining 56 cases which don't meet the above criteria were treated with craniotomy and drainage of hematoma and removal of membranes. Out of 230 patients 54 were bilateral SDH, 176 Unilateral SDH. Single burr hole surgery done in 133 cases and double burr hole surgery in 97 cases.

Results

More than 75% Radiological reduction of SDH in post-operative CT brain at 48 -72 hrs. was 97.75% for single burr hole surgery and 92.8% for double burr hole surgery. On comparison, single burr hole surgery v/s double burr hole surgery, post-operative pneumocephalus was found in 5.3% v/s 11.34%, fresh acute SDH seen in 4.5% v/s 9.3%. Recollection of SDH with second evacuation surgery within 3 months of first surgery was 3.76% for single burr hole surgery and 13.4% for double burr hole surgery (**P value <0.01**)

Conclusions

Single burr hole with subdural drain offers better results on comparison with double burr hole surgery with subdural drain in the surgical treatment of chronic SDH without septations, multiple membranes and acute clots.

Learning Objectives

By the conclusion of this session, participants should be able to describe the importance of single and double burr hole with subdural drain system in the management of chronic subdural hematoma

References

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Single burr hole surgery



Fig 1 Pre-op

Single burr hole surgery

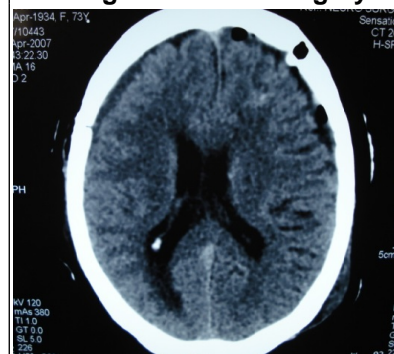


Fig 2 Post-op

Double burr hole surgery

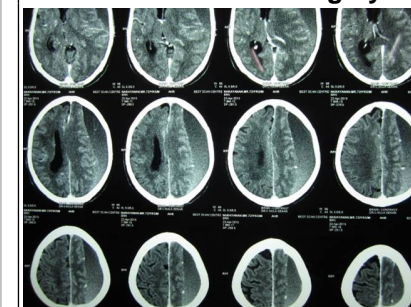


Fig 1 Pre-op

Double burr hole Surgery

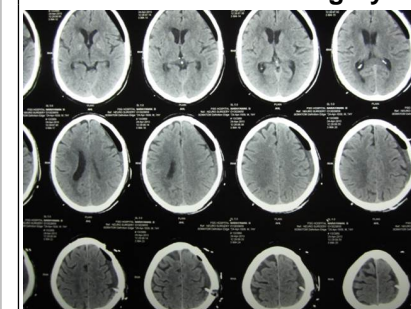


Fig 2 Post-op