

Efficacy of single burr hole with irrigation and sub-dural drain in the evacuation of chronic subdural hematoma.

Published 6-12-2023

Abstract

Background Chronic subdural hematoma (CSDH) remains one of the most common types of traumatic and spontaneous intracranial hematomas. The optimal method of treatment has not been definitely established. Surgical treatment options includes craniotomy, trephination, burrhole drainage and twist drill perforation. This study aimed at the evaluation of the clinical and radiological outcome after the efficacy of single burr hole with irrigation and subdural drain in the aim of successful evacuation of CSDH.

Results A total of 53 patients were included in this study, the mean age of patients was 61.53 ± 13.81 years. Results of the paired *t* test showed that the Glasgow coma scale has significantly improved by 0.89 points ($p < 0.001$) and that the average motor power has significantly improved for all individuals by 0.4 points ($p = 0.043$). We found that older aged patients have significantly less improvements in the postoperative motor power ($r = -0.317$, $p = 0.02$) and require longer hospital stay ($r = 0.32$, $p = 0.0197$).

Conclusions a single burr hole with irrigation and leaving a subdural drain is safe procedure in managing subdural hematoma. We did not experience major adverse events related to drain insertion and efficient evacuation of collection and no obvious increase in mortality or morbidity rates.