The Role of Surgical Treatment in Traumatic Subdural Hygroma: A Pilot Study

Sharhokh Yousefzadeh-Chabok, Marieh Hosseinpour, Zahra Mohtasham-Amiri, Ehsan Kazemnejad-Leili, Babak Alijani

Background and Aim: Traumatic subdural hygroma is the accumulation of CSF (cerebrospinal fluid) in subdural space following head trauma. The mass effect of hygroma on brain can impinge on consciousness. There are still many ambiguities on indications of hygroma surgery. This is an 11-year follow-up study which involves the patients suffering traumatic subdural hygroma who underwent surgery.

Methods & Materials/Patients: In this retrospective study, clinical records of 16 patients who were operated due to traumatic subdural hygroma were studied. The data from existing records in the hospital were collected and analyzed. They were then analyzed by Repeated Measures ANOVA using SPSS (Version 18). The differences were considered statistically significant at $P \leq 0.05$.

Results: In this study, there were 13 men (81.3%) and 3 women (18.7%) (Mean age=62 years old). In 87.75% of patients, hygroma was diagnosed 6 days after head injury. It was unilateral in majority of patients (56.3%) and located in frontoparietal area (81.3%). The most frequent concomitant injuries were contusions (25%) and subarachnoid hemorrhage (18.8%), respectively. GCS trend on admission and at discharge was significantly different from that of hygroma formation ($P<0.05$). One-fourth of patients had recurrence of hygroma after surgery. All patients (except one) had good outcome.

Conclusion: Subdural hygroma is a delayed lesion and surgical treatment improves the level of consciousness (LOC) in afflicted patients.