Ventricular irrigation

Al Menabbawyet al. conducted a prospective controlled study in 33 patients with cerebral ventriculitis in which most of the cases were cerebrospinal fluid shunt complication operations. Patients were divided into two groups. Removal of the ventricular catheter whenever present was performed in both groups. The first group was managed by ventricular lavage/irrigation, while the other group was managed using conventional therapy by inserting an external ventricular drain. Both systemic and intraventricular antibiotics were used in both groups. The outcomes were compared regarding mortality rate, modified Rankin Scale (mRS) score, and duration of hospital stay.

The mean age of the study population was 5.98 ± 7.02 years. The mean follow-up duration was 7.6 ± 3.2 months in the conventional group and 5.7 ± 3.4 months in the lavage group. The mortality rate was 25% (4/16) in the lavage group and 52.9% (9/17) in the nonlavage group ($p = 0.1$). The mRS score was less than 3 (good outcome) in 68.8% (11/16) of the lavage group cases and in 23.5% (4/17) of the conventional group ($p < 0.05$). The mean hospital stay duration was 20.5 ± 14.2 days in the lavage group, whereas it was 39.7 ± 16.9 days in the conventional group ($p < 0.05$).

Ventricular irrigation together with antibiotics is useful in the management of cerebral ventriculitis and associated with a better outcome and shorter hospital stay duration compared to current conventional lines of treatment [1].

1)
Al Menabbawy A, El Refaee E, Soliman MAR, et al. Outcome improvement in cerebral ventriculitis after ventricular irrigation: a prospective controlled study [published online ahead of print, 2020 Sep 4]. J Neurosurg Pediatr. 2020;1-9. doi:10.3171/2020.5.PEDS2063