

Comparative Outcome Of Hydrocephalus In Tuberculous Meningitis Treated With Or Without Csf Diversion. A Retrospective Study

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Purpose

The aim of this study is to describe the clinical, radiological and laboratory findings of Tuberculous Meningitis(TBM), and to investigate the outcome of hydrocephalus in TBM.

Methods

We retrospectively reviewed 143 adult patients diagnosed with TBM as per the consensus of TBM diagnosis over a 6-year period in 2 tertiary hospitals in XXX. Relevant clinical, laboratory, radiological and treatment data was studied. Patients with Hydrocephalus in TBM were further analysed based on their clinical grade and rendered treatment to identify prognostic factors and outcome of this subgroup of patients.

Results

The mean age of patients was 35.62 ± 12.4 , and they were followed up for a mean period of 258.93 ± 201.75 days. 44.1% of them had TBM with Hydrocephalus, of which 42.9% had surgical intervention. GCS (adjusted HR: 0.73, 95%CI: 0.67, 0.79) and CSF cell count (adjusted HR: 1.09, 95%CI: 1.05, 1.13) were positive risk factors for poor outcome following Multivariate Model Multiple Cox Regression. Pearson Chi-square was used to test the association between treatment rendered for hydrocephalus with the outcome, and findings revealed significant association ($p < 0.001$). Fisher exact further confirmed significant association between Modified Vellore Score with the outcome separately for patient with only anti-tuberculosis treatment ($p = 0.009$) and surgical intervention ($p = 0.001$).

Conclusion

Advanced stage of TBM at admission, hydrocephalus, and high CSF cell counts are factors associated with a poor prognosis for TBM. Hydrocephalus upon presentation is common in our TBM patients. This may be a poor prognostic marker when associated with advanced stages of TBM.