Statistical analysis plan

The distribution of continuous variables was assessed by Wilk–Shapiro Test. Baseline clinical, radiological, and laboratory variables between the two treatment arms were compared using chi square/ Fischer's exact test for categorical and Mann–Whitney U test for continuous variables. Death, functional outcome and side effects were compared using chi-square test. A pre-specified per-protocol analysis was conducted, including only those patients in both the groups who adhered to the treatment protocol without major violations, and completed the 6-month follow-up. Additionally, key outcomes including in-hospital mortality, and disability at 3 and 6 months were analyzed using an intention-to-treat approach, which included all 38 patients who provided consent and were randomized to either the treatment or control group. To identify the predictors of days to correction of hyponatremia, and days to achieve positive fluid balance, a hierarchical linear regression analysis was performed including TBM stage, worst GCS score, duration of illness, sex, age, minimum serum sodium level, severity of hyponatremia at randomization, presence of hydrocephalus, use of ventriculoperitoneal shunt, presence of exudates on cranial MRI, and CSF total cell count and protein levels. The variables with a $P \leq 0.10$ were included as covariates in the Cox regression analysis to assess the effect of propranolol on outcomes. Results were expressed as adjusted hazard ratios (AHRs) with 95% confidence intervals (CIs). A two-sided P-value < 0.05 was considered statistically significant. Kaplan–Meier survival analysis was performed to estimate and compare the days to correction of hyponatremia, and days to achievement of positive fluid balance between the propranolol and the placebo group. Differences between survival curves were evaluated using the log-rank test, with statistical significance defined as $P < 0.05$. Statistical analysis and graphs were prepared using SPSS 26.0 version.