Cover Page

Title: Effect of Perioperative Delta Sodium on Outcomes in Liver Transplant Recipients

NCT: number awaited

Date of document: 01/01/2018

Study protocol

All the patients who received a liver transplantation during the study period were identified and medical records were retrieved from the physical database at the medical records department.

Data collected included the following: Patient's age, gender, MELD score, body mass index, type of Liver Transplant (living donor or deceased donor recipients), underlying liver disease, history of hepatic encephalopathy (HE), and treatment with diuretics before surgery.

Laboratory data recorded included serum sodium levels: preoperative, postoperative, peak, and trough (Na pre, Na post, Na max, and Na nadir),. Delta sodium (ΔNa) is defined as Na post – Na pre, and maximum delta sodium (ΔNa-max) as Na max – Na nadir.

Intra-operative administration data of sodium bicarbonate, crystalloids and colloid volume, type, units of fresh frozen plasma (FFP) and packed red blood cells (PRBC), Vasopressin, Noradrenaline and diuretics was collected.

Outcome variables assessed were the number of ICU days, number of ventilator days both NIV and invasive, day of extubation, any postoperative neurological complications,re-intubation if any and cause thereof were noted.

Statistical Analysis

Data were expressed as mean ± SD or median (interquartile range). Categorical Variables were compared with Pearson Chi-Square test, and continuous variables were compared with Student t test. Non-normal continuous variables were compared using

the Mann-Whitney U test (unpaired data). Analysis of variance (ANOVA) or Kruskal – Wallis ANOVA for repeated measurements was used for statistical analysis. Correlation were performed to measure the relationship between variables. Logistic Regression was used to evaluate the association between risk factors with an event. A p-value of <0.05 was considered statistically significant for all comparisons.