Reviewer's report

Title: The efficacy of hypotonic and near-isotonic saline for parenteral fluid therapy given at low maintenance rate in preventing significant change in plasma sodium in post-operative pediatric patients: protocol for a prospective randomized non-blinded study

Version: 1 Date: 13 June 2011

Reviewer: Satish Kalhan

Reviewer's report:

This is a well designed study to examine the efficacy of hypotonic and near-isotonic saline for parenteral fluid therapy in post appendectomy subjects. The goal is to prevent significant hyponatremia.

The authors have carefully addressed most of the related issues and done appropriate sample size calculations.

Minor Essential Revisions: The monitoring of plasma sodium only at two time points is too infrequent. The investigators should monitor plasma sodium at least every eight hours in order to avoid missing any low levels which may require intervention for clinical considerations.

Discretionary revisions: The authors should discuss whether their findings can be generalized to other post surgical situations. By recruiting only appendectomy subjects, they will be able to recruit a somewhat homogenous group. However in other situations, with varying degree of non-osmotic production of ADH, the response may be quite different.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'