Reviewer's report

Title: Should colloid boluses be prioritized over crystalloid boluses for the management of dengue shock syndrome in the presence of ascites and pleural effusions?

Version: 3 Date: 23 December 2010

Reviewer: Po-Liang Lu

Reviewer's report:

The authors revised this manuscript, described these cases more detailed, and made more reasonable conclusions. The authors’ main points are: In DSS with third space fluid “accumulation”, the beneficial of colloid bolus should be evaluated carefully in the future. Because the colloid effect was immediate and transient, reasonable use of colloid (such as FFP) and mention the possible transfusion reaction is important.

Minor Essential Revisions

1. In the article, the authors may consider to use the term “third space fluid accumulation” to replace "third space fluid loss"?

2. The author hypothesize that resuscitation of patients who already have third space fluid loss at the time of development of severe DSS giving priority to colloids rather than to crystalloids would prevent development of recovery phase pulmonary oedema.

However, the three patients had received both crystalloids and colloids resuscitation while DDS with third space fluid accumulation had developed. It is difficult to differentiate the pulmonary edema in recovery phase is related to crystalloids or colloids. The above may be addressed in the discussion part.

3. Regarding to the double blinded RCT, NEJM, 2005, 353:877–889. In the 2nd paragraph of discussion part, the authors stated that “in this study there is no mention about the presence of third space fluid loss at the time of recruitment. They have analysed only the occurrence of them following resuscitation. Therefore, it is difficult to interpret which fluid would be beneficial in patients who already have third space fluid loss at the time of severe DSS.”

However, that study analyzed the possible Adverse Effects of Fluid Treatment (in the table 3 of that article); no difference between crystalloids and colloids resuscitation in clinical fluid overload, right pleural effusion, ascites and even the dosage of diuretic agent usage. The article conclude that the effects of colloids are transient; and despite the early rebound in the hematocrit seen in the children receiving colloids but no difference between the different fluids in the overall severity of fluid overload when it was assessed 48 to 72 hours after the study infusion. Besides, the adverse of colloids should be noticed.

The comments on the previous articles may be revised to reveal the true
situation.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

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