Reviewer's report

Title: Increased permeability-oedema versus atelectasis in pulmonary dysfunction after trauma and surgery: a prospective cohort study

Version: 2 Date: 21 June 2007

Reviewer: Andreas Reske

Reviewer's report:

Reviewer Comments:

GENERAL:

The manuscript has been greatly improved. The authors have answered the vast majority of my original concerns with the paper to my satisfaction. I personally find that shorter sentences would ease the reading of the manuscript, but this decision is of course left to the authors.

MAJOR COMPULSORY REVISIONS:
none

MINOR ESSENTIAL REVISIONS:

Introduction:
1. Page 4, line 20: “oemema” should be “oedema”

Patients and methods:
2. Page 5, line 18: I suggest to insert “artery” after “radial”
3. Page 5, line 25: The abbreviation “PEEP” should be used here instead of the full term “positive end expiratory pressure”.
4. Page 6, line 4: red cell transfusion history: If trauma patients were included within 24 hrs post trauma, but red cell transfusion history was only recorded for the 12 hrs prior to the study, a significant number of transfusions given during initial resuscitation could have been missed?! Please clarify!
5. Page 6, line 5, and page 7, line 24: How could the radiologist examine the retrocardiac space on anteroposterior chest X-rays? I mentioned this contradiction already in my previous review, the authors should correct this!

Results:
6. Page 9, line 2: To what parameter (i.e., PaO2, or P/F ratio) does the number (126) refer?

Discussion:
7. Page 10, line 9: should be “… an elevated PLI”, not “… an elevated in PLI”. Please delete “in”!
8. Page 10, line 24: Why is an increase in oxygenation in response to a recruitment maneuver suggestive of atelectasis only? An edematous lung may be even better recruitable as seen, for example, in patients with cardiogenic pulmonary edema under CPAP? In this context, I also refer to the work of Hubmayr and colleagues (cf. Hubmayr R AJRCCM 2002, Wilson TA JAP 2001).

**What next?:** Accept after minor essential revisions

**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.

**Declaration of competing interests:**

I declare that I have no competing interests