Author's response to reviews

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

Authors:

A.B. Johan Groeneveld (johan.groeneveld@vumc.nl)

Version: 2 Date: 30 May 2007

Author's response to reviews: see over
To the Editor of BMC Anesthesiology

Amsterdam, May 30 2007

Dear Dr Kouremenou,

Thank you for comments on our paper MS 1146705184132926, Groeneveld: Increased permeability-oedema and atelectasis in pulmonary dysfunction after trauma and surgery: a prospective cohort study. We have revised the paper according to suggestions, but due to substantial rewriting and use of old software we will not indicate all the changes made in the text. Instead, we will give a point-by point answer to issues raised by the reviewers below.

To reviewer 1.
Thank you for comments. We have decided not to again explain PLI, EVLW and LIS measurements in appendices since these have been dealt with many times in other publications (by us). We nevertheless have added a figure to illustrate our PLI measurement. Of course we are willing to supply the data after acceptance of our manuscript.

To reviewer 2.
Thank you for comments. We appreciate your careful reading and have followed almost all of your suggestions for improvement. Briefly,
1-4. Abstract: We have fully followed your suggestions
5-9. Introduction: We have revised according to your suggestions, as you can see.
10-23. We did not define ALI/ARDS according to the consensus conference criteria since, among others, these patients did not have a PA catheter. We have discussed some issues concerning definitions in the discussion section, as far as relevant to characterization of our study population used to answer our research questions. This prospective study excluded patients at 78 year of age or older, and used a cutoff PEEP >10 (or ≥11) cm H₂O to account for the effect of PEEP on CVP measurements. This was all done to exclude overhydration as much as possible, since we did not want to study cardiogenic oedema, but to study the relative importance of atelectasis versus permeability oedema and a lung vascular injury. We did not record cormorbidities. We included a figure of scitillation probes and clarified some of the technique described elsewhere on numerous occasions. Indeed, the probes collect radioactivity data from perhaps a part of the lung, and we do not know the sampling error, since we have always used the lung apices (for reasons of comparison) which are closest to the probes and expected to have least interference by radioactivity attenuation and scatter from other organs/tissues. The others issues have been clarified, hopefully.
24-36. Results/tables/figures. We have deleted irrelevant results and explained rs. We have corrected errors (thank you) and revised the section according to suggestions.
38-52. Discussion. Completely rewritten and reorganised. We also have taken the minor issue into account, except for drawing a regression line and 95% CI in the figures, since we did rank correlation and not linear correlation. We stated leukocyte-depleted red cells since this is not standard in all countries yet, while this issue may affect study results by attenuating risk for TRALI, for instance.

We hope we answered the questions satisfactorily and hope that the paper is now suitable for publication.

Sincerely,

AB Johan Groeneveld MD PhD FCCP FCCM
Dept Intensive Care
VUmc