Reviewer's report

Title: Severe thoracic trauma caused left pneumonectomy complicated by right traumatic wet lung, reversed by extracorporeal membrane oxygenation support—a case report

Version: 1 Date: 08 Sep 2018

Reviewer: João Borges

Reviewer's report:

In this case report entitled "Severe thoracic trauma caused left pneumonectomy complicated by right traumatic wet lung, reversed by extracorporeal membrane oxygenation support", the authors concluded that V-V ECMO and low tidal volume ventilation helped a thoracic trauma patient survive a lung edema period, and prevented ventilator associated pneumonia.

Comments to Authors:

In the DISCUSSION section it is written "Lung recruitment maneuvers and selection of an appropriate positive end expiratory pressure (PEEP) might be suitable measures for coping with this concern."

A recent experimental study addressed multiple aspects regarding optimizing PEEP in the management of one-lung ventilation (OLV), including preventing of ventilator-induced lung injury (VILI) [1]. Among available interventions is the optimization of PEEP. A useful definition of optimal PEEP may be the lowest PEEP level that maintains a maximum dynamic compliance and thereby low driving pressures. Postoperative pulmonary complications are common after OLV [2], which further increases necessity to optimize protective ventilation during these procedures. Interventions that lead to lower driving pressures may reduce mortality in patients with the acute respiratory distress syndrome (ARDS) [3]. A proper decremental PEEP trial, after an appropriate lung recruitment maneuver, enables an individual titration of optimal PEEP [4-7].

So, I would like to ask the authors about the PEEP setting/management throughout the mechanical ventilation of this patient (in details)? Any lung recruitment maneuver was done? Please include this information as well as a short discussion about the concepts mentioned above in the manuscript.

References


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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