

PEER-REVIEW REPORT

Name of journal: World Journal of Critical Care Medicine

Manuscript NO: 34587

Title: Effects of intrapulmonary percussive ventilation on airway mucus clearance: A bench model

Reviewer's code: 00502743

Reviewer's country: Argentina

Science editor: Fang-Fang Ji

Date sent for review: 2017-05-10

Date reviewed: 2017-05-14

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		[Y] No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		[Y] No	

COMMENTS TO AUTHORS

I was impressed by this interesting and excellent work. Using simulation models to demonstrate situations similar to those experienced by living subjects results in a correctly scientific approach, studying presumed physiological or pathological conditions in simulator models prior to their application in humans. In this work, the artificial lung conditions of patients with or without intubation are carefully reproduced, being able to demonstrate experimentally that IPV improves the mucus clearance in simulated models.

PEER-REVIEW REPORT

Name of journal: World Journal of Critical Care Medicine

Manuscript NO: 34587

Title: Effects of intrapulmonary percussive ventilation on airway mucus clearance: A bench model

Reviewer's code: 02548034

Reviewer's country: Taiwan

Science editor: Fang-Fang Ji

Date sent for review: 2017-05-10

Date reviewed: 2017-05-17

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input checked="" type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good		<input type="checkbox"/> Duplicate publication	
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Minor revision
	<input type="checkbox"/> Grade D: Rejected	BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

This is an interesting and well-conducted bench study. I have only one comment. Under-humidification was recognized as a potential problem when applying IPV during mechanical ventilation (MV) (Ref). Suboptimal humidification caused by the high inspiratory flow rate and gas decompression during IPV may increase the risk of airway obstruction by secretions. Dellamonica et al. have shown that adequate absolute humidity could only be provided by placing the heated humidifier on the inspiratory line downstream of the IPV device. The heated humidifier seems not included in the experimental circuit utilized in this study. Was under-humidification a likely explanation for the distal displacement of mucus into the lungs on the IPV-MV model? Ref: Dellamonica et al. Intrapulmonary percussive ventilation superimposed on conventional ventilation: bench study of humidity and ventilator behaviour. Intensive Care Med. 2008;34(11):2035-43.