

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 28622

Title: Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device

Reviewer's code: 03497352

Reviewer's country: United States

Science editor: Shui Qiu

Date sent for review: 2016-07-14 10:19

Date reviewed: 2016-07-26 21:35

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 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 type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input type="checkbox"/> No	

COMMENTS TO AUTHORS

Overall nicely written article. Just have a few minor comments: 1) Provide a reference for the line: "While use of echocardiography has proven useful for optimization of HeartMate II (Pleasanton, CA) CF-LVAD pump speed, this has not proven helpful for other CF-LVADs" 2) For the line: "This flow increased to a range of 8-9 liters/minute on post operative day #8...", what does 'this' flow mean? The Fick CO? Kindly clarify. 3) Methods, 1st para: Provide an abbreviation for revolutions per minute in parenthesis i.e. revolutions per minute (rpm). 4) Discussion, 3rd para: "Loss of the V-wave on the PCWP tracing, coupled with aortic valve closure by echocardiogram, argued against the presence of a high cardiac output state", please add: with increasing rpm after Loss of the V-wave on the PCWP tracing, coupled with aortic valve closure by echocardiogram. Also I have difficulty understanding this sentence. How does that mean that it argues against a high output state. Kindly clarify 5) If the ultrasound flow probe measurements are inaccurate after the immediate postop period, why would we use those? Thank you for an opportunity to review.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 28622

Title: Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device

Reviewer's code: 03493210

Reviewer's country: United States

Science editor: Shui Qiu

Date sent for review: 2016-07-14 10:19

Date reviewed: 2016-07-20 03:54

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 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 checked="" 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 type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

The manuscript is a case report involving a single patient with documentation of hemodynamic and echocardiographic changes during a ramp right heart catheterization/echocardiogram, in a patient with a continuous flow left ventricular assist device with comparison of cardiac output by catheterization to that measured via flow probe on the outflow graft to the left ventricular assist device. Obviously, this is a single patient and RAMP catheterization and echocardiograms have been previously published in continuous flow left ventricular assist devices, so there is nothing novel about this aspect of the case. Indeed, the only really novel aspect of this case is the comparison of cardiac output by catheterization to that by the flow probe. I think the manuscript could be made stronger with a clear delineation of how the ramp catheterization was actually used in this patient; he authors do not describe what the baseline speed actually was and what the final set speed was at the end of the ramp study. Similarly, they do not determine what parameters they actually used to set the final speed. This is one of the major purposes of a RAMP study so it needs to be better delineated in the text. Similarly, the echocardiographic portion of the ramp study was not really



BAISHIDENG PUBLISHING GROUP INC

8226 Regency Drive, Pleasanton, CA 94588, USA

Telephone: +1-925-223-8242

Fax: +1-925-223-8243

E-mail: bpgoffice@wjgnet.com

<http://www.wjgnet.com>

described in much detail at all. They mention that the aortic valve opening and the mitral regurgitation decreased as pump speed increased. However there was no note of change in the left ventricular dimensions or septal position. With regards to the observation that the measured flow through the graft was higher than the Fick cardiac output, I think a major limitation of their conclusions is that there are using an assumed Fick for estimated O₂ consumption. In the postoperative state, or in sepsis, it seems quite reasonable/likely that the patient might have a significantly higher O₂ consumption than that estimated by $K \times BSA$. The K they use is 125 but in our center, we will often use a K of 133. I suspect that this is part of the reason why there was a difference between the assumed Fick cardiac output and that via the flow probe. It seems unlikely that there would be a lot of sensor 'drift' this soon after the LVAd and probe were implanted. It would be interesting and would have been easy for the authors to obtain thermodilution cardiac output readings - this is commonly done in surgical intensive care units. Can they comment on why this was not done?

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 28622

Title: Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device

Reviewer's code: 02520738

Reviewer's country: Italy

Science editor: Shui Qiu

Date sent for review: 2016-07-14 10:19

Date reviewed: 2016-07-20 05:23

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input checked="" type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input 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"/> No	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		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

To: Lian-Sheng Ma, President and Company Editor-in-Chief Baishideng Publishing Group Co., Limited World Journal of Cardiology Title: "Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device" Dear Editor, We have read through the manuscript and we think that this is a very interesting work. The paper is well written and gives a good insight in LVAD approaches.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 28622

Title: Simultaneous ramp right heart catheterization and echocardiography in a ReliantHeart left ventricular assist device

Reviewer's code: 00227531

Reviewer's country: Spain

Science editor: Shui Qiu

Date sent for review: 2016-07-14 10:19

Date reviewed: 2016-07-23 10:37

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 report deserves publication in the WJC if the authors respond properly to the given remarks