Format for ANSWERING REVIEWERS

24th July 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 11747-edited_23_07_14.doc).

Title: Primary angioplasty for infarction due to isolated right ventricular artery occlusion

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Name of Journal: *World Journal of Cardiology*

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The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewers:

(1) **It is not clear what happen to EKG once TIMI 3 flow restored in the RV branch. Did the ST elevation in V1 and V4R resolved. They need to show follow up EKG.**

ST elevation in standard V1 partially resolved. In the right-sided VR4 and VR5, ST elevation resolved. We have amended the figures to include pre and post-PCI ECGs in as in Figure 1A-1D.

(2) Do they have (outpatient) follow up echo documenting restoration of RV systolic function? Did this occur?
A post-PCI follow-up echo performed after 4 weeks showed normal RV function with restoration of radial contraction.

(3) It is not clear from figure 1 that there is TIMI 3 flow in PDA/PLV(I cannot see any contrast in the PDA/.PLV) . They need to show first angiographic picture documenting that there was TIMI 3 flow in distal RCA/PDA/PLV(as some time with repeated angiogram, TIMI 3 flow restore with distal embolization of the thrombus).

We have amended the figures to include stills pre and post angioplasty (figure 2). This is the cranial view of the RCA and the frame has been recorded showing opacification of the distal RCA/PDA and PLV.

(4) What is clinical application? And what is their recommendation for other clinicians in similar setting? As the authors pointed out that Isolated RVI has usually benign clinical course and majority of time RV function recover on follow up ECHO., So does PCI on ostial RV marginal branch is worth of the potential risk,(as there is significant risk of retrograde dissection into main large RCA with potential catastrophic consequences). For example reference # 3 authors did not attempted PCI on the isolated RV branch occlusion and the

patient recovered well with no complication. Can they support their recommendation with references from literatures?

The received wisdom and consensus is this is benign and does not warrant revascularization. There is no high quality data comparing revascularization and a conservative approach. In our case there was haemodynamic compromise and cardiogenic shock which resolved with restoration of flow. The benefit was survival and minimization of a critical care bed requiring the use of a pulmonary artery catheter and potential inotropic support.

(5) Though TIMI 3 flow was restored, but final result is (figure D) still showing significant (almost critical) residual stenosis.

The reviewer is correct. We elected not to perform further angioplasty or insert a stent, as the primary objectives (restoration of flow and resolution of cardiogenic shock) were achieved. The vessel size and further intervention would bring all the risks with little benefit.

(6) Their final conclusion that 'PCI is probably the best intervention for IRVI' need references ?

This statement as been amended to: 'We believe PCI is a good option for IRVI when there is haemodynamic compromise. We do not have a reference to support this statement.

(7) When was the high dose dobutamine echo done? they need to address the safety of high dose dobutamine echo in setting of acute coronary syndrome(with references from literature)

High-dose dobutamine stress echocardiography was performed approximately 4 weeks after the index event.

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Cardiology*.

Sincerely yours,

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