Author’s response to reviews

Title: An unusual case of giant cell myocarditis missed in a Heartmate-2 left ventricle apical-wedge section: a case report and review of the literature.

Authors:

Kim Anderson (kim.anderson@umontreal.ca)
Michel Carrier (michel.carrier@icm-mhi.org)
Philippe Romeo (philippe.romeo@icm-mhi.com)
Guy B Pelletier (pelts.1247@videotron.ca)
Mark Liszkowski (marktm99@yahoo.com)
Michel White (m_white@icm-mhi.com)
Normand Racine (normand.racine@icm-mhi.org)
Anique Ducharme (anique.ducharme@umontreal.ca)

Version: 3 Date: 19 December 2012

Author’s response to reviews: see over
Montreal December 12, 2012

Mr Vipin Zamvar  
Royal Infirmary of Edinburgh,  
Dr David Taggart, John Radcliffe Hospital  
United Kingdom  
Co-Editors in chief  
The Journal of Cardiothoracic Surgery  
E-mail: zamvarv@hotmail.com

Ms. Ref. No.: 1408277584804238

Title: An unusual case of giant cell myocarditis missed in a Heartmate-2 left ventricle apical-wedge section: a case report and review of the literature.

Dear Sir,

Please find attached a revised version of our manuscript. We also would like to thank the reviewers for their comments. We have addressed all of the issues in the attached revised version and have answered every specific points rose.

I hope that this version will be acceptable for publishing in the The Journal of Cardiothoracic Surgery.

Yours truly,

Dr Anique Ducharme, MD, MSc, FRCP.  
Associate professor of medicine, Université de Montréal  
Director Heart Failure clinic  
Institut de cardiologie de Montréal, C. de Recherche (S-2700)  
5000 Bélanger est, Montréal (QC), H1T 1C8  
TÉL: 514-376-3330, ext 3947; fax: 514-593-2575  
Email: anique.ducharme@umontreal.ca
Response to reviewer's comments:

Referee 1:

1 & 2) There are many instances of improper use of the plural form, as well as awkward phraseology, and a lot of repetition.

- We’ve made significant changes throughout the text and have reviewed both the semantic and syntax.

3) While I must admit that it is possible the case may represent a 'missed' giant cell myocarditis, I think it is unlikely that such a dramatic presentation with severe LV dysfunction would occur and still not exhibit any evidence of giant cells in an LV core specimen. I could see missing GCM in a relatively small RV biopsy (especially since the same portion of the RV tends to be biopsied) but not a large core. I think it would help if the authors were to discuss the differential diagnosis with a little more detail. For instance, why could this not be a granulomatous myocarditis. Could this have been a secondary lymphoma with recurrence and the granulomas seen on the RV biopsy specimen represent a response to infection or to inotropic drugs (which has I believe been reported). While this may not have been the case, it is this discussion which I think will add the most value to the case as opposed to only the novelty of the presentation.

- We would like to thank this reviewer for his comments that greatly enhanced our manuscript. We have modified the discussion section accordingly and included the possibility of a granulomatous myocarditis in the differential diagnosis.

Referee 2:

1. Although the authors correctly question the initial diagnosis and suggest that GCM may have been present from the onset, I do not agree with the suggestion that GCM has a 'normal' course post-transplant. It is well known that GCM requiring mechanical support has a poor prognosis.

- We agree with this reviewer and have therefore removed the controversial sentence: «patients who undergo transplantation for GCM have a similar prognosis as other cardiac transplanted patients [1, 4]».

2. Typically GCM is known for fulminant heart failure and arrhythmias. The authors describe autopsy findings of a very significant coronary disease. A deeper discussion of the patient's post-op course may be warranted to help understand this unusual finding. This discussion should also address the odds of such findings in non-GCM transplant patients.

- We are grateful to this reviewer for his comments. First, please note that significant CAD was found in the donor heart and not in the GCM explanted one. Nevertheless, we elected to modify the text in order to discuss the presence of atherosclerosis of the donor heart. These changes can be found in the Discussion section. «As transplant cardiologist we are often facing critical decision making such as to reject/accept a donor heart for our critically ill patients. Unfortunately, we sometimes rely on incomplete or erroneous
information, as was the so-called normal angiogram report from the referring center. Having known the real extent of CAD (revealed at autopsy) in this donor heart, we would gone without transplantation, significant donor coronary atherosclerosis being a major risk for early graft failure, with reported 30-day mortality of 7.5% with single-vessel involvement and 42.3% with multiple-vessel disease[4].»

Minor Essentials
1. The obvious language issues.
   - See Response to reviewer no.1

2. Page 3. I do not think that an EF improving from 10% to 45% should be qualified as 'some improvement'. Further, I rarely see HM-II patients with a NYHA class of I???. These devices are for support not improvement! If she was indeed class I, further documentation is warranted.
   - The text was changed to «She improved on support with minimal symptoms and some evidence of LVEF improvement (from 10 to 45% on full support) by echocardiography.»

Referee 3:

1) This is an interesting case that raises some interesting questions but provides little in the way of answers to those questions. I have no major concerns with regards to the case presentation but simply question whether such an unusual case would be of significant interest to your readership.
   - We obviously disagree with this reviewer and think that this unusual case would be very interesting to your readership.

2) I would also point out that many centers would question transplanting a patient only 2 years following a treated B-cell lymphoma, although those types of decisions can be very center specific.
   - We would like to thank this reviewer for his comment. We initially elected to implant a MCS as bridge-to-candidacy, but the clinical evolution was unfavorable. As truthfully mentioned by this reviewer, the optimal delay between oncology treatment and solid organ transplant remains controversial, and this particular issue was certainly raised during several multidisciplinary discussions. It was the oncologist’s opinion that her lymphoma had a localized presentation and had been cured by chemotherapy, with low risk of recurrence even on immunosuppressive therapy.