Reviewer’s report

Title: Giant right coronary artery aneurysm presenting with non-ST elevation myocardial infarction and severe mitral regurgitation: a case report

Version: 1 Date: 20 May 2011

Reviewer: Opoku-ware Mensah

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

Dear Sirs/Madam,

In the first place you have a very good case report; which, in my opinion will be of use both to Cardiothoracic Surgeons and Physicians. I strongly think that it is worthy of publication.

I do, though, have some issues which I would like to bring to your attention; and possibly make your case report still better. The following are my points:

1/. In your discussion about aetiology you, correctly mentioned genetic/congenital causes. I do think that you need to mention the well-documented association of Giant Aneurysm of Coronary Artery and Kawasaki Disease, which is prevalent in East Asians.
2/. I do think that you may want to mention the rare but documented symptom of haemoptysis - see case report: Successful Surgical Treatment of a Giant Coronary Artery Aneurysm Presenting with Recurrent Profuse Haemoptysis; By Opoku-Ware Mensah et. al, in the Journal of Cardiothoracic Surgery 2008, 3.36.

3/. I do have some issues with the description of your surgical strategy:

A/. You stated that the left Internal Mammary Artery was grafted to the first branch of the Anterior Descending Artery. In my view, the phrase, the first branch of the Anterior Descending Artery is anatomically not specific. Please note that the accepted anatomical nomenclature of the branches of the Anterior Descending Artery is: the first diagonal branch, the second diagonal branch and so on. Moreover there is a known trifurcation variant of the Anterior Descending Artery - a large first septal branch, a large first diagonal branch and the distal branch of the Anterior Descending Branch. In some situations, the large septal branch may be successfully grafted. I assume that, in your case, you did, indeed, graft the first diagonal branch. I do think that by specifically stating that you grafted the first diagonal branch you would avoid creating any confusion.

B/. You stated that you grafted the coronary Arteries, then repaired the Mitral Valve; and finally you excluded the Giant Coronary Artery Aneurysm by opening it and closing the distal opening. I do think that the Giant Aneurysm should have been opened immediately after the cardioplegic arrest then perform the Coronary Artery Grafting, and followed by the repair of the Mitral Valve. My explanation is as follows: majority of Coronary Artery Aneurysm do, indeed, have lot of layered thrombus inside; and any manipulation of the heart, even in the arrested state, does pose a danger of embolus flowing to the distal segment of the Coronary Artery; and this need not inadvertently occur.

In any case, I do think that you need to correct this section.

In conclusion, I would like to suggest that you give some thought to the points I have raised and make the necessary corrections so that your splendid case report would be published to the benefit of our profession.

Thank you very much,
Sincerely yours.

Opoku-Ware Mensah MD, PhD,
Specialist Cardiothoracic Surgeon; Specialist in Cardiothoracic Surgical Intensive Care Medicine.

Quality of written English: Acceptable

Declaration of competing interests:

I declare that I have no competing interests.
Opoku-Ware Mensah