Reviewer’s report

Title: Non Infective Severe Aortic Paraprosthetic Leakage 7 Years After Surgery: The Role of Suture Technique.

Version: 1 Date: 27 January 2011

Reviewer: sandro gelsomino

Reviewer’s report:

Agrifoglio and co-workers present a case of a 48-year old man undergoing redo-AVR for severe aortic regurgitation secondary to rupture of the semicontinuous suture.

Paraprosthetic regurgitation is a serious complication after aortic valve replacement and semicontinuous suture technique seems to increase the risk of significant paraprosthetic leakage (PL) which continues beyond the first year of surgery.

The case report is well written on an important subject and it deals with a controversial issue.

Nonetheless I believe that some changes are necessary, which, in my opinion, could improve the paper.

Major revisions

Case report: The description of peripheral cannulation and sternal re-entry is redundant as it was routinely performed . I suggest authors delete this part of the paper along with the reference n.1.

Authors correctly focused their discussion on advantages/drawbacks of semicontinuous suture. They underlined that the major disadvantage is the risk of significant paraprosthetic regurgitation. I believe authors should discuss more extensively the available literature in relation to the incidence of paraprosthetic leak and how it is related to the suture employed as the question is still controversial and the occurrence of PL varies between authors.

They should discuss if, in their opinion, the suprannular position might be related to Paraprosthetic leakage

Discuss briefly the potential role of 3-D echocardiography in the early diagnosis of paraprosthetic leakage


Page 3 Line 6 Please specify End diastolic volume and End systolic volumes. The use of Indexed volumes would be preferable.

Finally, what are they conclusions? What kind of suture do they normally
employ? Why? Does any factor influence the choice (anatomy, type of valve, valve position ........ ) What do they suggest?

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Declaration of competing interests:**

'I declare that I have no competing interests'