Reviewer's report

Title: Mid-term outcomes for Endoscopic versus Open Vein Harvest: a case control study

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Reviewer: Dheeraj Mehta

Reviewer's report:

This manuscript aims to contribute to the body of evidence examining clinical outcomes following open versus endoscopic saphenous vein harvesting. It has the following limitations:

1) It is a single surgeon, single centre, retrospective comparison of two non-contemporaneous groups, for which follow up is complete for the primary endpoint of mortality, but not the secondary endpoints of MACE and freedom from angina. The study seems underpowered to address either endpoint.

2) There is insufficient methodological data relating to the endoscopic vein harvest, specifically the type of endoscopic kit used, parameters for CO2 (open/closed system, inflation pressure/flow limits), timing/dose of heparin administered, and site of harvest (thigh/lower leg). Additionally, it is unclear from the manuscript who was responsible for vein harvest in the open group.

3) This data includes the Unit's early experience of the endoscopic procedure, and it would be useful to know the number converted to an open procedure, and perhaps a subgroup analysis after exclusion of the first 20 endoscopic cases.

4) The two groups are not fully matched, with significant differences in left main stem disease, LV function, and urgency of procedure.

5) Lack of complete follow up for secondary endpoints makes interpretation of clinical outcomes difficult, and implies significant caution when interpreting statistical data relating to these endpoints.

6) There is a discrepancy as to the number of deaths in the open group as identified in Table 2 (10 or 11?).

7) The data on angiographic outcomes in a handful of patients is anecdotal at best, and is of little scientific value. The table is not necessary.

In conclusion, while the manuscript represents an interesting reflection on the experience and outcomes of a cohort of patients within a single surgeon's practice, I do not feel that it adds greatly to the scientific body of evidence regarding clinical outcomes following open and endoscopic saphenous vein harvest. The author will no doubt be reassured by the low incidence of clinical events observed in the endoscopic group within his practice, and should feel justified in continuing his experience with this technology within appropriate clinical governance frameworks.
Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests