Reviewer's report

Title: Double vs single internal thoracic artery harvesting in diabetic patients: role in perioperative infection rate.

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Reviewer: Jacob Zeitani

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The authors compared the incidence of sternal wound infections in 81 diabetic patients who underwent CABG surgery with one or both ITA where the latter were harvested as a pedicle graft. They hypothesise that harvesting the ITA as pedicle might not affect negatively sternal wound healing.

In this study no mediastinitis occurred, however, 5 patients experienced superficial wound infection, 2 in the single ITA group and 3 in the bilateral ITA group with no significant difference between the groups.

Several points should be taken into consideration:

1. The Authors evaluated the harvesting ITA technique as a pedicle in diabetic patients. Looking to the study data, in both groups the incidence of NON insulin diabetes patients were higher then 80%. Although, all diabetic patients are at higher risk for wound complications, such study should have focused on the insulin dependent diabetes.

2. In contrast to other publications based on far larger series, where ITA harvesting techniques were evaluated, the skelotenization technique found to be crucial in reducing wound complications.

In conclusion, diabetes mellitus, especially the insulin dependent, is generally considered to be a major risk factor for sternal wound complications, in particular when both ITA are harvested. Skeletonization of both internal thoracic arteries significantly decreases this risk.

Considering the relevant publications dealing with postoperative wound complications and risk factors based on large series where the results are opposed to the authors conclusions (which are based on small number of patients), might be misleading.

What next?: Reject as not sufficiently sound

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.