

In Response to Effects of Del Nido Cardioplegia on Coronary Bypass Surgery

To the Editor,

In his article 'Effects of Del Nido cardioplegia on coronary bypass surgery'^[1] mentions that there is a difference in the number of distal grafts, which changes the aortic cross clamp (ACC) time and cardiopulmonary bypass (CPB) time regardless of the cardioplegia. The author has further enquired if there is any difference in the number of grafts between the two groups in our study.

We would like to thank for the keen interest shown in our study titled "Myocardial protection in cardiac surgery: Del Nido versus blood cardioplegia."^[2]

We do agree that the number of distal grafts can be an independent factor influencing the aortic cross clamp (ACC) time and cardiopulmonary bypass (CPB) time. Ideally when there are more distal anastomosis, the blood

cardioplegia will have to be repeated more frequently and hence the ACC and CPB time will increase. This might not be significant in the Del Nido group because of its prolonged duration of action. The use of left internal mammary artery (LIMA) graft could likely reduce the total CPB time by reducing number of proximals.

López-Menéndez^[3] in their study found ACC time and CPB time to be significantly longer in the crystalloid cardioplegia group when compared to blood cardioplegia, which they have attributed to slightly higher number of grafts in the crystalloid cardioplegia group. However in another study by Nardi *et al.*^[4] it was found that ACC time and CPB time was comparable in both the blood cardioplegia group and crystalloid cardioplegia group despite the blood cardioplegia group having lower number of distal grafts.

Ninety patients in our cohort had undergone coronary artery bypass grafting. They were equally distributed among the Del Nido and blood cardioplegia groups (45 in each group). The analysis of the number of distal grafts used showed that the mean std. deviation (SD) of the number of distal grafts was 3.8 (0.72) in Del Nido group and 4 (0.715) in blood cardioplegia group, respectively. The two groups were found to be comparable with reference to the number of distal grafts (P value = 0.239). The analysis of the usage of LIMA graft showed that both the groups were comparable (mean 0.91 (SD- 0.29) in each group). Hence, the number of distal grafts or use of LIMA in the two groups did not impact the lack of significant difference in ACC time and CPB time in our study.

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Conflicts of interest

There are no conflicts of interest.

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