

Apology to the use of double mammary

Fernando Moraes¹

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Never apologize, do the best
(American proverb)

Few surgical procedures have changed so dramatically the natural history of disease in the last 40 years, as coronary artery bypass grafting in relation to coronary artery disease. The relief of angina pectoris and increased life expectancy observed in the majority of the thousands of patients operated worldwide is an indisputable fact. It should be noted that these benefits were most notable in certain subgroups of patients, especially those with multivessel disease and left coronary artery trunk lesion.

One of the milestones in the evolution of coronary artery bypass surgery was the demonstration by the Cleveland Clinic group, the superiority in terms of patency of the left internal thoracic artery (LITA) over the saphenous vein [1]. Later, this group observed that the use of the LITA favorably influence long-term survival of patients [2]. Confirmation of these findings by other groups made almost mandatory the use of the LITA to revascularize the left anterior descending artery, especially in high risk patients such as diabetics and those with low ejection fraction [3].

Thus, the research phase began in order to determine whether there would be additional benefits with the use of two internal thoracic arteries (ITAs). First, it was shown similar patency rates in the medium and long term, the ITAs [4]. Subsequently, numerous reports have shown increased survival and reduced need for late reintervention with the use of two ATI even in patients with poor ventricular function and serious comorbidities [5,6]. On the other hand, certain arguments are demystified such as the use of two ATI would promote more bleeding and a higher rate of sternal infection [7].

Recent studies found that diabetic patients may present high sternum infectious complication rates if they make

use of the dissected ITA pedicle [8,9]. However, Santos Filho et al. [10] showed that in this group of patients, sternal perfusion is lower than in non-diabetics, justifying a higher rate of infectious complications. Alternatively, when the ITA is dissected in a skeletonized fashion, sternal perfusion, with the use of scintigraphy, does not suffer a significant reduction, which seems to be the reason to reduce rates of infectious complications of the sternum and mediastinal disorders in diabetic patients in which two ATI were used [8,9].

Despite all the facts listed above, the use of two ATI is only performed in about 5% of services, according to analysis of the database of the *Society of Thoracic Surgeons* (STS) [11]. Why? It is hard to find the answer. But whatever the reasons, it is time for all cardiovascular surgeons to consider, make self-criticism and change their practice, increasingly aiming to offer a highly efficient operation. This is vital, especially for the competition of interventional cardiology, which would hardly reach the level of excellence of surgery if it is held with the utmost quality, which includes the use of two ATI.

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1. Member of Brazilian Society of Cardiovascular Surgery

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