

Some considerations regarding the history of internal mammary artery harvesting

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Abstract

“Letter to the Editor” does not require abstract

Dear Editor,

With great interest, I read the article by Yim and associates¹ and congratulate them for the quality of the review carried out on the internal mammary artery harvesting techniques. However, I would like to help clarify some aspects specifically related to the history of this procedure.

The skeletonized IMA harvesting technique is usually considered to be newer than pedicle dissection. Actually, when Arthur Vineberg first implanted an IMA in a human heart in 1950, he only separated the arterial vessel from the chest wall. For more than a decade, only arteries were implanted according to Vineberg’s proposed method, and it wasn’t until the early 1960s that William Sewel proposed implanting a pedicle into the myocardium, that also contained the internal mammary vein and other tissues (“pedicle operation”) with the intention of draining excess blood and avoiding the formation of myocardial hematomas.²

It is also incorrect to claim that skeletonized IMA harvesting was introduced due to concerns offered by reduced sternal blood flow and potential mediastinitis. In January 1972, David Galbut and his group introduced systematic skeletonized harvesting into their series of patients revascularized with bilateral internal mammary arteries, some time before that procedure began to be linked with deep sternal wound infections. Galbut probably only took advantage of obtaining longer arteries and easier construction of sequential anastomoses.²

Furthermore, when Cunningham first described the IMA’s skeletonized harvesting technique in 1992 he specified that to avoid thermal injury to the artery, it was extremely important to keep the cautery setting on low throughout the dissection.³ After this advice, smoke never seems to have been a concern for surgeons, so it was hardly the reason for the introduction of harmonic technology in IMA dissection, which was also initially used in the “open harvesting” technique.⁴

Finally, I consider it curious that this review does not include the semiskeltonization technique, introduced in 1997⁵ and currently used by various groups.

References

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Note: The author of this manuscript is not an employee of any agency of the Cuban government; he is only a cardiovascular surgeon in a public hospital. The author of this manuscript also does not represent the Cuban government in relation to this “letter to the editor”.