Authors have nothing to disclose with regard to commercial support.

SAPHENOUS VEIN AS SECONDARY CONDUIT IN A Y-COMPOSITE GRAFT WITH THE LEFT INTERNAL THORACIC ARTERY

To the Editor:

We read with great interest the article by Kim and colleagues.¹ The authors concluded that there was no inferiority of the saphenous vein (SV) compared with the right internal thoracic artery (RITA) as a Y-composite graft with the left internal thoracic artery (LITA).¹

The incorporation of the recommendations for systematic use of bilateral internal thoracic artery (BITA) grafts in the “real world” has not occurred yet, with only 5% of the coronary artery bypass grafting (CABG) surgeries adopting this approach.^{2,3} This is due to factors such as the resistance to changes, logistic difficulties to obtain the grafts, and concerns of infectious complications.²⁻⁴

Current evidence demonstrates that the benefits from the use of the BITA can be extended to high-risk populations without a statistically significant increase in rates of deep sternal wound infection (DSWI).^{3,4} Saran and colleagues³ presented a retrospective study in 2018 indicating that high-risk patients submitted to CABG, with BITA use, had an increase in survival, with the incidence of DSWI increasing from 0.5% to 1.2% ($P = .088$).³ This finding shows a trend toward an increase in infectious risk, especially if compared with the incidence of 0.3% of DSWI in all CABG surgeries included in the Society of Thoracic Surgeons database.

We emphasize that the majority of studies assessing DSWI risk report isolated case series from large centers with strict control of comorbidities, not depicting a reality verified worldwide. In less-developed countries, the patients usually are more uncompensated, protracting the learning curve for BITA incorporation, considering that this approach would be adopted initially in

FIGURE 1. Y-composite graft of SV and LITA 16 years after implantation.

populations at lower risk. In addition, as a limiting factor, studies indicating intraoperative BITA graft conversion rates up to 15.3% in large centers make surgeons more judicious in adopting it consistently. Considering this, SV grafts remain the safest option in CABG for many surgeons.

The 5-year results of the Saphenous Vein Versus Right Internal Thoracic Artery as a Y-Composite Graft (SAVE RITA) are promising because they demonstrate that the SV, used with atraumatic manipulation and as a Y-composite graft with the LITA, may have clinical and angiographic results similar to those of the RITA in this same configuration.¹ The authors attributed this to the reduced trauma in the vein's harvesting, the different hemodynamic stress, and the possibility of LITA donating endothelial-protective factors, aspects that our group has also discussed for more than a decade, with suggestions that these results may be even better by selecting venous segments without valves (Figure 1).^{1,5}

The study by Kim and colleagues¹ presents several limitations, and they have already illustrated that no infectious complications were observed, especially in the group of patients in whom both internal thoracic arteries were harvested.

In brief, further evidence is necessary to illustrate that the SV under optimal conditions of surgical manipulation and configuration may result in patency and clinical results comparable to those currently seen with arterial grafts. Nonetheless, it is possible to idealize that with improved

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technical adequacy, the results of the venous grafts could be considerably better.

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THE SEARCH FOR THE SECOND BEST CONDUIT: A 40-YEAR-OLD DEBATE

Reply to the Editor:

The points in the letter by Lobo Filho and colleagues regarding the 5-year results of the Saphenous Vein Versus Right Internal Thoracic Artery as a Y-Composite Graft (SAVE RITA) trial are very well taken.

The debate on the second best conduit for coronary bypass surgery is at least 4 decades old. As Lobo Filho and associates point out, the use of bilateral internal thoracic artery (BITA) (suggested among others by Barner in 1972¹) remains an exception for most cardiac surgeons. The concern for sternal wound complications (associated with substantial economic penalties in the United States) is definitely a limiting factor in the routine use of the BITA. It is important to note that a clear experience to outcome relationship exists in BITA grafting for both sternal wound complications and long-term outcomes,² so that less-experienced surgeons are likely to have a higher incidence of sternal complications (and thus be even less willing to use BITA). Of note, the radial artery (now a class I indication in the European Society of Cardiology/European Association for Cardio-Thoracic Surgery Guidelines³) is an excellent alternative arterial graft that does not increase the risk of sternal wound complications.

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The use of the no-touch saphenous vein is an interesting alternative to arterial grafts. The lower degree of endothelial damage due to the less traumatic harvesting and dilatation of the vein may have the potential to significantly increase the patency rate compared with the traditionally harvested saphenous vein grafts. This benefit potentially can be further increased by proximally anastomosing the no-touch saphenous vein to an internal thoracic artery graft (as in the SAVE RITA trial⁴). An additional advantage of this strategy is the allowance of a no-touch anaortic bypass procedure and the potential for a significantly reduced neurologic risk.

However, despite the commendable work of Kim and colleagues⁴ and a few other groups around the world, at the moment, evidence supporting the use of the no-touch saphenous vein is very limited. The potential benefits of this approach should be tested in appropriately sized randomized trials.⁵

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SAPHENOUS VEIN COMPOSITE GRAFTING WILL BE A "Y'S" DECISION

Reply to the Editor:

We thank Lobo Filho and colleagues,¹ who published an important study regarding myocardial revascularization using a saphenous vein (SV) composite graft based on the left internal thoracic artery (ITA), for their interest in our study.