

WORLD HEART RHYTHM CONFERENCE

November 15-17, 2018 Istanbul, Turkey

Sternal wound healing for bilateral IMA harvesting patients after CABG

Kenan Abdurrahman Kara
Yeditepe University Hospital, Turkey

The success of a CABG is highly attributable to excellent long term survival outcomes related to the use of the left internal thoracic artery to left anterior descending artery (2). Spurred by this success, surgeons introduced the use of the right internal thoracic artery for bilateral internal thoracic artery (BITA) revascularization (3). BITA usage was shown to prolong survival when compared to patients who underwent single LIMA (4, 5). However, BITA usage is not becoming more widespread among heart surgeons. One of the most important reason not to use BITA is sternal wound healing problems including sternal dehiscence and mediastinitis especially diabetic patients. For ITA harvesting, conventional pedicled technique, skeletonized technique and semi-skeletonized techniques are defined. When BITA is harvested with the conventional pedicled technique, sternal infection rates range between 1.7% to 6.9% (6–10). A full skeletonized technique has been used in some institutions with reported sternal infection rates of 1.5% to 1.9% (10–12). To capitalize on the advantages of both the conventional and the full skeletonized technique, a semi-skeletonized technique has been developed (12). With this technique, ITA is harvested at the maximum length and less traumatic damage occurs in parasternal tissues compared to the pedicled technique (12–16). Also post-operative mechanical sternal dehiscence of sternum is still a frightening and devastating complication for both patients and surgeons. This may result ranging from increased postoperative pain to sternal wound infection and mediastinitis and readmissions in post-operative period. Obesity, diabetes, Chronic Obstructive Pulmonary Disease, smoking, New York Heart Association class IV, osteoporosis, bilateral mammary artery use, prolonged cardiopulmonary bypass time, excessive amount of blood transfusion are all risk factors for operative sternal complications (10–13). The study enrolled 12 patients who underwent an isolated CABG operation using cardiopulmonary bypass (CPB) by a single surgeon between March 2017 - December 2017 at Hisar Intercontinental Hospital. 12 patients (10 males, 2 females; mean age: 55.083) underwent CABG operation using semi-skeletonized BITA (Table 1). Post-operative sternal wound complications were not noted. Because SWCs are the main concern when using BITA grafts, we evaluate the incidence of these complications with the semi-skeletonized BITA harvesting technique. None of patients had deep sternal infection or mediastinitis or mechanical sternal dehiscence. Only one Diabetic patient had superficial wound separation without any infective leakage.

kenankaradoc@gmail.com

Notes: