© H. Hirose, A. Amano, A. Takahashi, 2003.

## Hitoshi Hirose, MD, FICA<sup>1</sup>, Atsushi Amano, MD<sup>2</sup>, Akihito Takahashi, MD<sup>3</sup> SKELETONIZED BILATERAL INTERNAL MAMMARY ARTERY HARVESTING DECREASES STERNAL COMPLICATIONS IN PATIENTS WITH DIABETES

<sup>1</sup> Department of Cardiovascular Surgery, Shin-Tokyo Hospital, Chiba, Japan Currently, Department of Thoracic and Cardiovascular Surgery Cleveland Clinic Foundation, Cleveland, OH. <sup>2</sup> Department of Cardiovascular Surgery Juntendo University Hospital, Tokyo, Japan <sup>3</sup> Department of Cardiovascular Surgery Cardiovascular Institute Hospital, Tokyo, Japan

Sternal complications were high if the bilateral internal mammary arteries (BIMA) were used for patients with diabetes. To minimize sternal ischemia, the skeletonized IMA harvesting using an ultrasonic scalpel has been utilized. This study was performed to confirm the benefit of skeletonized IMA harvesting (group S, n=115 patients) comparing to the pedicle harvesting (group P, n=99) in diabetes patients.

There were 2 perioperative myocardial infarctions in group S and 1 in group P (p=NS), none of which were related to the IMA graft. The incidence of mediastinitis was similar between two groups (0.9% in group S vs. 3.0% in group P, p=NS), however, minor chest wound complications were more frequently observed in group P than in group S (3.5% vs, 12.1%, p<0.05). Postoperative angiography showed no IMA occlusions in either group.

In conclusion, Bilateral skeletonized IMA grafting for diabetic patients is safe and may decrease wound complications.

**Corresponding Author:** Hitoshi Hirose, MD, FICA E-mail: genex@nifty.com