Abstract:

BACKGROUND: No data are available on the early vasoreactive profile of skeletonized internal thoracic artery grafts. METHODS: Fifteen patients undergoing primary isolated coronary artery bypass grafting were randomly assigned to receive a skeletonized or pedicled internal thoracic artery graft. On the second postoperative day all patients were subjected to follow-up angiography and endovascular infusion of serotonin, acetylcholine, and isosorbide dinitrate. RESULTS: Internal thoracic artery grafts were widely patent in all cases. Mean diameters of the internal thoracic artery were 1.95 +/- 0.17 mm in the pedicled group and 2.26 +/- 0.40 mm in the skeletonized group. After serotonin challenge, mean internal thoracic artery diameters were reduced to 1.44 +/- 0.34 mm and 1.64 +/- 0.14 mm, respectively; acetylcholine challenge lead to a moderate degree of vasoconstriction (1.55 +/- 0.59 mm in the pedicled group and 1.84 +/- 0.15 mm in the skeletonized group). No statistically significant difference was evident between the two groups at any step. CONCLUSION: Skeletonization does not affect the early vasoreactive profile of internal thoracic artery grafts used for surgical myocardial revascularization.