Endoscopic vein harvest for coronary artery bypass grafting: technique and outcomes

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Background: The greater saphenous vein is a common conduit for coronary revascularizations. Traditional vein harvesting uses long incision(s) that can lead to significant morbidities. A minimally invasive technique has been developed that allows the harvest of much of the saphenous vein with one incision and fewer morbidities.

Methods: The authors' technique and outcomes on 110 patients with minimally invasive harvest (endoscopic vein harvesting) was presented. Comparisons were made with an equivalent retrospective group within the same hospital and to a smaller (n = 28) prospective group at other hospitals.

Results: Endoscopic vein harvesting has evolved to one above-knee incision of 3 cm length that allows for the harvest of 35 cm of vein. Harvest times were longer for endoscopic vein harvesting, showed a learning curve, and appeared to reach a baseline of 35 minutes. Incision closure times were less for the endoscopic vein harvesting group. Total skin to skin operating times for the entire cardiovascular procedure did not differ between the groups. In relatively homogeneous populations, leg infection rates did not differ, but other leg morbidities were less for the patients who underwent endoscopic vein harvesting. Hospital readmissions for leg wound care were low in both groups, although the number of office visits required for leg care was higher for patients undergoing traditional vein harvesting. Pain perception by the patients was much less for the endoscopic vein harvesting and remained lower for up to 4 weeks.

Conclusion: Although endoscopic vein harvesting is a relatively new procedure, it is safe, effective, and less painful for the patient and carries fewer morbidities.

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