Encouraging results with endoscopic vein harvest for infrainguinal bypass Erdoes LS, Milner TP

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Background: Wound complications after infrainguinal vein bypass remain a significant source of morbidity. Endoscopic saphenous vein harvest has emerged as a viable alternative to minimize vein harvest incisions.

Methods: Infrainguinal bypass using endoscopic vein harvest was performed in 214 limbs in 197 consecutive patients between May 1998 and July 2004. The indication for bypass was limb salvage in 88.3%, claudication in 9.3%, and other in 2.4%. Atherosclerotic risk factors were prevalent, with diabetes mellitus in 68% and dialysis-dependent renal failure in 11.7%.

Results: The procedure was successful in all but one patient. This patient was early in the series and had a friable varicose vein. Ipsilateral greater saphenous vein was used in 89.7%, contralateral greater saphenous vein in 8.4%, and lesser saphenous vein in 1.9%. Two injuries to the main trunk of the vein occurred early in the series. Assisted primary patency at a mean follow-up of 18 months (range, 1 to 48 months) is 77.2% by life-table analysis. For patients with claudication, rest pain, or minimal gangrene, the average length of stay was 3.15 days (range, 1 to 6 days). Wound complications occurred in 16 patients (7.5%); 10 of these required only local care (class I and II), and 6 had deep wounds threatening the leg or graft (class III). Only 5 patients, all with class III wounds, required readmission to the hospital for graft-related problems.

Conclusion: Endoscopic saphenous vein harvest is a useful adjunct to infrainguinal vein bypass, with short length-of-hospital stay, few wound complications, and low hospital readmission rates. The authors also noted that there is no increase in operating room time once the learning curve is overcome, and patient satisfaction is very high with EVH. Endoscopic vein harvest is recommended as the procedure of choice for vein procurement for infrainguinal bypass procedures.

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