Graft patency following endoscopic saphenous vein harvesting (EVH) is equivalent to or better than traditional harvest

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Objective: EVH is safe, effective, with less leg pain and morbidity than traditionally harvested saphenous veins and with no histologically evident vein damage. Long term graft patency following EVH remains unknown.

Methods: 101 patients with EVH for CABG were studied by electron beam computed tomography (EBCT) to determine graft patency: A retrospective group of 51 patients (131 grafts) mean 3.74 ± 0.24 years post CABG and a prospective group of 50 patients (131 grafts). The prospective group had graft flow studies intraoperatively followed by EBCT 6 months post CABG.

Results: Graft patency rate for the total group was 95%. Graft failure rate was 5.3% in the prospective group at 6 months and 4.5% in the retrospective group at 3.7 years post CABG. This is less than the historical failure rate of 13% in the first year post op, which increases further in subsequent years. Gender, hypertension, DM, and smoking did not affect graft occlusion. 40 of 46 individual grafts were patent (2 were diseased but patent) and 209 of 216 sequential grafts were patent (8 diseased but patent).

Conclusion: Graft patency following EVH for CABG is equivalent or better than traditional harvest techniques. Sequential grafting may have a beneficial effect.

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					Graft Status by EBCT		
	Pts, N	Grafts, n	Individual Grafts, n	Sequential Grafts, N	Open	Occluded	Diseased But Patent
Retrospective	51	131	18	113	120	6	5
Prospective	50	131	28	103	119	7	5