**4-YEAR OUTCOME ANALYSIS OF ENDOSCOPIC VEIN HARVESTING FOR CORONARY ARTERY BYPASS GRAFTING**

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Objective: Despite increasing recognition that endoscopic vein harvesting (EVH) is associated with decreased leg wound morbidity, improved cosmetic results and enhanced patient satisfaction, concerns persist regarding the safety and efficacy of EVH in terms of mortality, short- and long-term graft patency and need for reintervention. This study compares in-hospital and mid-term outcomes for EVH and open vein harvesting (OVH) at our institution.

Methods: From January 2008 to October 2011, 1991 consecutive patients underwent isolated or combined coronary artery bypass grafting (CABG) at our institution.

772 patients with EVH were propensity matched to 772 patients who had OVH. Their data were prospectively entered into the cardiac surgery database (PATS; Dendrite Clinical Systems, Ltd, Oxford, UK) and analyzed retrospectively. Outcome measures included in-hospital mortality, major complications, readmission to hospital for cardiac causes, need for reintervention and medium-term mortality. The mean duration of follow-up was 26.4 ± 10.3 months.

Results: EVH was associated with a significant reduction in rate of donor site infection compared to OVH (0.39% vs 3.9%, p = <0.001). The remaining major in-hospital clinical outcomes were found to be similar. Short- and medium-term vein graft patency was similar. After adjusting for clinical covariates, EVH did not emerge as an independent predictor of readmission to hospital for cardiac causes, medium-term mortality and need for reintervention. Risk adjusted survival was 94% for EVH patients and 93% for OVH patients (p = 0.96) during the medium-term follow-up.

Conclusion: Our analysis confirms the short- and mid-term safety and efficacy of EVH.