tions, routine use remains controversial. We evaluated CIM and compared graft patency in patients treated by surgeons who performed routine CIM versus those who performed selective CIM.

**Methods:** We reviewed the Vascular Study Group of New England database (2003-2010) and assessed the use of CIM (angiography and/or duplex) among patients undergoing LEB. Surgeon-specific CIM strategy was categorized as selective (<80% of LEB) versus routine (≥80% of LEB). Exclusion criteria were acute limb ischemia, bilateral procedures, and surgeon volume <10 cases/study period. Primary graft patency at discharge and 1-year were analyzed based on CIM utilization and surgeon-specific CIM strategy. Multivariable analyses were performed using Poisson regression.

**Results:** Among 2032 LEB procedures performed by 48 surgeons, CIM was used in 1368 cases (67.3%). Dialysis (OR 1.7, 95% CI 1.12-2.59, \( P = .01 \)), elective LEB (OR 3.99, 95% CI 1.2-13.1, \( P = .02 \)), great saphenous vein conduit (OR 2.0, 95% CI 1.6-2.5, \( P < .0001 \)), and tibial/pedal target (OR 1.8, 95% CI 1.4-2.3, \( P < .0001 \)) were associated with CIM use. In multivariate models CIM was not associated with improved graft patency at discharge (OR 1.1, 95% CI: 0.7-1.7, \( P = .64 \)) or 1-year (OR 1.0, 95% CI: 0.8-1.4, \( P = .88 \)). Sixteen surgeons (33%) were routine and 32 (67%) were selective CIM users. Discharge and 1-year graft patency was 96% versus 94% (\( P = .21 \)) and 68% versus 72% (\( P = .09 \)) in patients of routine versus selective CIM users. In multivariate analysis, routine or selective CIM strategy was not associated with improved discharge (OR 0.8, 95% CI 0.6-1.1, \( P = .3 \)) or 1-year (OR 1.1, 95% CI: 0.9-1.2, \( P = .56 \)) graft patency.

**Conclusions:** In our observational cohort, surgeon-specific strategy of selective CIM after LEB has comparable outcomes with routine CIM. Use of selective rather than routine CIM may lead to decreased health care resource utilization.

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**PS98.**

**Risk Factors for Premenopausal PAD: A Review of Manitoba Vascular Laboratory Databases from 1993-2010**

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**Objectives:** Despite similar risk factors, women have lower prevalence of PAD in the premenopausal period compared with age-matched men. The prevalence of PAD increases from 3-4% up to 29% in women after menopause. By the 7th to 8th decades, the prevalence is comparable in men and women. Little is known about the factors that protect women from PAD prior to the onset of menopause. The purpose of the study was to retrospectively review the ABI and risk factor data in premenopausal (<53 years of age) women referred for ABI testing in the province of Manitoba between 1993 and 2010.

**Methods:** In Manitoba, a province of 1.1 million, virtually all ABI tests are performed at two hospitals by trained technicians. Both sites also collect risk factor data. ABI was considered to be abnormal if less than 0.9. Risk factors included were smoking, coronary arterial disease, obesity, diabetes, hypertension, hypercholesterolemia, cerebrovascular disease, and chronic renal failure.

**Results:** Between 1993 and 2010, 928 women under the age of 53 underwent ABI testing (4.2% of all women in the database). Of these, 260 had abnormal ABI (2.6%). Eighty-five percent were between the ages of 41-52 and 27.9% had critically low ABI. For the current population, there was no difference in the ABI between men and women. Little is known about the factors that protect women from PAD prior to the onset of menopause. The development of premenopausal PAD is unusual and does not develop without multiple combined risk factors. In most cases with smoking as a combined risk factor, other smoking other than smoking was present in 9.1% of women. In premenopausal non-smokers, PAD did not develop unless 3 or more risk factors were present.

**Conclusions:** The development of premenopausal PAD is unusual and does not develop without multiple combined risk factors. Current and former smoking was most associated with the development of premature PAD. ABI testing in premenopausal women without multiple combined risk factors, including smoking, is unlikely to be of value.

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**PS100.**

**Prosthetic Graft versus Vein as Conduit for Extra-Anatomic Bypass: Short-term Outcomes from a National Database**

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**Objectives:** To compare 30-day mortality and graft failure after use of prosthetic graft (PG) versus vein graft (VG) as conduit for extra-anatomic arterial bypass (EAB).

**Methods:** Patients who underwent axillary-femoral artery bypass (AFB) and femoral-femoral artery bypass (FFB) grafts were identified from the 2007-09 National Surgical