Abstract

**Effects Of Endovascular First Strategy On Splice Vein Bypass Outcomes**

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**Abstract Body:**

**Introduction:** Aggressive endovascular interventions for patients without adequate full length venous conduit have gained popularity. The purpose of this study is to evaluate the outcomes of splice vein bypass as primary treatment (SVB) versus treatment after failed endovascular intervention (ESVB) for infrainguinal revascularization. **Methods:** A retrospective analysis of a single vascular group’s database of all splice vein bypasses was queried for demographics, indications, intraoperative details, and outcomes. Exclusion criteria included patients lost to follow up, acute ischemia, aneurysm, dual outflow, and bypass revisions. SPSS software was used for statistical analysis. **Results:** 235 infrainguinal splice vein bypasses were performed between January 2011 and March 2017. 182 (77%) were SVB and 53 (23%) were ESVB with a mean follow up of 488 days (range: 1-2140). Demographics between the SVB and ESVB groups were similar in all categories recorded: Diabetes, hypertension, coronary artery disease, current smoker, chronic obstructive pulmonary disease, hyperlipidemia, renal disease (P=0.29). Indications for bypass weren’t statistically significant between SVB and ESVB (P=0.48): Rutherford class 3 (14 vs 1), class 4 (51 vs 20), class 5 (67 vs 18) and class 6 (50 vs 13). Inflow
was grouped into iliac (3.4%), femoral (87%), and popliteal (9.7%). Outflow arteries were grouped into below knee popliteal (11%) and infrapopliteal (89%). Inflow/outflow arteries as well as number of splice pieces per bypass were not different between groups. Major amputation rates were not different between SVB and ESVB for the entire study period (31, 17% vs 6, 11.3%, P=0.69). There was no statistical difference with patency outcomes based on Kaplan Meier survival analysis (Fig. 1). **Conclusion:** An aggressive endovascular first strategy for treatment of patients without adequate autogenous conduit appears to offer benefit without negatively effecting future bypass options. Splice vein bypass patency and major amputation rates in this series were not affected by a prior endovascular treatment.

**Author Disclosure Block:**