

Schermerhorn: Endologix, consulting fees or other remuneration (payment).

PS166.

Risk Stratification of the Overall Survival of Patients With Critical Limb Ischemia due to Below the Knee Lesions

Takahiro Ohmine, Kazuomi Iwasa, Terutoshi Yamaoka. Vascular Surgery, Matsuyama Red Cross Hospital, Matsuyama, Ehime, Japan

Objectives: To assess the efficacy and durability of endovascular therapy (EVT) as a first approach, we evaluated the short- and long-term outcomes of the first revascularizations achieved using EVT-first compared with bypass surgery (BSX)-first. Next, we explored factors influencing overall survival (OS) using multivariate analyses.

Methods: A total of 228 consecutive below-the-knee (BTK) revascularization procedures (189 patients) for critical limb ischemia (CLI) between November 2006 and September 2013 were retrospectively analyzed. Patients undergoing revascularization were divided into two groups. No statistically significant differences were noted between the two groups with respect to preoperative background.

Results: The average age was 74.7 years (123 men and 66 women) in both groups. The ratio of lost to follow-up of all subjects was only 1.1%. Mean follow-up periods were 22.6 (range, 3-86) months. No significant differences were noted in the short-term results in EVT-first revascularizations compared in BSX-first. The long-term OS rates were slightly better in BSX-first than in EVT-first. Multivariate-analysis of all subjects revealed that the OS rates were not affected by EVT-first but by five severe risk factors as follows: (1) age >80 years, (2) hemodialysis, (3) congestive heart failure, (4) serum albumin <3 g/dL, and (5) a nonambulatory limb.

Conclusions: OS in patients with CLI due to BTK lesions is worse with three or more of the severe risk factors, and in such patient the EVT-first procedure is effective.

Table. Multivariate analysis for overall survival using of significant parameters according to univariate analysis.

Variables (N=189)	HR	P
Age >80 years	2.6	<.01
EVT first	1.3	.44
Hemodialysis	1.7	.03
Congestive heart failure	3.0	<.01
Nonambulatory leg	1.7	.04
Albumin <3.0	2.2	.02
Body mass index <18.5	1.3	.23
C-creative protein >3.0	1.2	.43

Author Disclosures: K. Iwasa: Nothing to disclose; T. Ohmine: Nothing to disclose; T. Yamaoka: Nothing to disclose.

PS168.

Dissecting the Results of Lower Extremity Revascularization in Dialysis-Dependent Patients

John M. Fallon¹, Philip P. Goodney¹, David H. Stone¹, Virendra I. Patel², Brian W. Nolan¹, Jeffrey A. Kalish³, Yuanyuan Zhao¹, Allen D. Hamdan⁴. ¹Dartmouth Hitchcock Medical Center, Lebanon, NH; ²Massachusetts General Hospital, Boston, Mass; ³Boston Medical Center, Boston, Mass; ⁴Beth Israel Deaconess Medical Center, Boston, Mass

Objectives: Optimal patient selection for revascularization remains a clinical challenge among the hemodialysis (HD) dependent, despite advances in surgical care and endovascular techniques. The purpose of this study was to examine contemporary real world outcomes of HD patients to facilitate patient selection for revascularization.

Methods: A regional multicenter registry was queried between 2003 and 2013 for HD-dependent patients (N = 689) undergoing open surgical bypass (n = 295) or endovascular intervention (n = 394) for lower extremity revascularization. Patient demographics and comorbidities were recorded. The primary outcome was overall survival. Secondary outcomes included amputation-free survival (AFS), graft patency, and freedom from major adverse limb event (MALE). Short-term and long-term outcomes were examined. Multivariate analysis was performed to identify independent risk factors for MALE and death.

Results: Among the 689 HD patients undergoing lower extremity revascularization, 66% were male and 83% white. Tissue loss was the most common indication for intervention. The 1-, 2-, and 5-year overall survival remained low at 59%, 43%, and 21%, respectively. Observed 1-year and 2-year AFS was at 40% and 17%. Mortality was the primary mode of failure for AFS, (70% bypass, 80% endovascular; P = .08). Survival and AFS did not differ significantly between revascularization techniques. Multivariate analysis identified age >80 (HR, 1.5; P = .014), preadmission nursing home status (HR, 2.19; P = .001), chronic obstructive pulmonary disease (HR, 1.46; P = .038), and preoperative wheelchair/bedridden status (HR, 1.94; P < .001) as independent predictors of MALE or death.

Conclusions: Overall survival and AFS among HD-dependent patients remains poor, irrespective of revascularization strategy. Mortality remains the primary driver for these findings. Focus for improved results should emphasize predictors of survival to optimize patient selection for revascularization.

Author Disclosures: J. M. Fallon: Nothing to disclose; P. P. Goodney: Nothing to disclose; A. D. Hamdan: Nothing to disclose; J. A. Kalish: Nothing to disclose; B. W. Nolan: Nothing to disclose; V. I. Patel: Nothing to disclose; D. H. Stone: Nothing to disclose; Y. Zhao: Nothing to disclose.