

PVSS3 Factors Affecting Survival In Revascularization For Mesenteric Ischemia

Jafar Tay, Charles W. Acher, Jon M Wesley, William D. Turnipseed, John R Hoch, III, Sandra C. Carr, Girma Tefera; *University of Wisconsin Medical School, Department of Surgery, Section of Vascular Surgery, Madison, WI*

OBJECTIVE: To evaluate factors affecting perioperative mortality and long-term survival in revascularization for mesenteric ischemia.

METHODS: We retrospectively reviewed the records of 78 patients who underwent revascularization procedures for mesenteric ischemia from 1984-2004. Data on demographic information, metabolic profile, and type of revascularization (autologous bypass, synthetic bypass, endarterectomy, arterial reimplantation) was correlated with perioperative mortality and long-term survival.

RESULTS: Fifty-one patients (65%) were female and mean age was 66. The mean follow-up was 47 months. Sixty-five (83%) patients were symptomatic, 13 (17%) patients had mesenteric occlusion found when evaluated for other vascular diseases with no reported symptoms. The patients presented acutely in 27 (33%) and with chronic symptoms in 56 (67%). Five patients had two procedures each. Revascularization procedures (83) included 33 (40%) endarterectomies, 20 (24%) autogenous arterial, 23 (28%) synthetic, and 7 (8%) vein bypasses. Revascularizations were to one vessel in 37 (45%) and to two vessels in 46 (55%). Aortic replacement was inquired in 29 of 83 procedures (35%). By multivariate analysis, age and acuity were significant risk factors for perioperative mortality ($p=0.04$ and 0.02 , respectively). The type of operation, gender, BMI, number of vessels revascularized, and need for aortic replacement were not significant factors for perioperative mortality. Using multivariate analysis, the only significant factor for long term survival found was the use of autogenous arterial revascularization or endarterectomy when compared to bypass graft with synthetic material or vein ($p=0.001$). Additionally, if the asymptomatic patients, who were revascularized at the time of other vascular procedures, were excluded, age and acuity were still significant for perioperative mortality ($p=0.03$ and 0.04 , respectively); age, autogenous arterial revascularization and endarterectomy versus bypass with synthetic material or vein were still significant risk factors for long term survival ($p=0.005$ and 0.003 , respectively). Also, with asymptomatic patients excluded, BMI became significant for long-term survival ($p=0.02$).

CONCLUSION: The use of autogenous arterial revascularization and endarterectomy provide better long-term survival for both acute and chronic visceral ischemia. In symptomatic patients with mesenteric ischemia, age is an important risk factor for both perioperative mortality and long-term survival, and BMI is a factor in long-term survival.