

At 1 year, only one amputation and no deaths occurred among the Rutherford 4 patients. However in Rutherford 5 patients, amputations occurred in 39% (n = 9) of BMAC vs 71% (n = 5) of controls ($P = .020$), and deaths occurred in 17% (n = 4) of BMAC vs 14% (n = 1) of controls ($P = 1.0$). Median time to amputation was 85 days in BMAC vs 55 days in control.

Conclusions: At 1 year, Rutherford 4 patients in the combined control and treatment group had a low event rate for death or major limb amputation of 7% (1 of 14). A continued trend toward reduced amputation is seen in patients with tissue loss (Rutherford 5) treated with BMAC, with no adverse effect on survival and no BMAC-related complications. A pivotal study has been initiated to further explore these promising data.

Functional Outcomes Following Catheter-Based Iliac Vein Stent Placement

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Introduction and objectives: Although previous reports have demonstrated the efficacy of catheter-directed thrombolytic therapy and iliac vein stenting for the management of iliofemoral DVT, functional outcomes remain undefined. The purpose of this study was to determine long-term outcomes and functional quality of life among patients treated with iliac vein stenting.

Methods: Records of all patients treated with iliac vein stent placement between March 2006 and March 2011 were examined for primary patency, assisted primary patency, and secondary patency. Long-term functional outcomes were measured quantitatively, including ongoing symptoms and return to work status.

Results: During the study interval, 32 patients (33 limbs) underwent iliac vein stent placement. Of these 23 (72%) were women, with an average age of 43 years. Twenty-five patients (78%) were diagnosed with acute DVT, 89% of which occurred in the left leg. Catheter-directed thrombolysis was used in 23 of 25 patients (92%) with acute DVT. All patients treated with lysis and stenting presented with pain and edema in the affected limb. One-year primary, assisted primary, and secondary patencies were 75%, 96%, and 96%, respectively. Freedom from reintervention at 1 year was 83%. Treatment was associated with a sustained significant reduction in pain (91% vs 6%, $P < .001$) and edema (97% vs 12%, $P < .001$) at a mean follow-up of 29 months (range, 5-83 months), at which time 89% of patients were reported to be at their baseline pre-DVT functional status with return to work.

Conclusions: Aggressive therapy of symptomatic iliac vein stenosis or occlusion with venography, catheter-directed thrombolysis, and iliac vein stent placement provides durable patency and freedom from reintervention. Most patients can anticipate good functional recovery with decreased pain, edema and a high likelihood of returning to work.

Isolated Rectal Ischemia Following Aortic Reconstruction

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Introduction and objectives: Colonic ischemia is a well-documented complication after aortic reconstruction. During abdominal aortic aneurysm operations, the inferior mesenteric artery distribution may be affected, thus compromising the blood supply to the left colon with subsequent ischemia. The rectum, particularly the middle to lower rectum, is primarily supplied by the internal iliac artery and its branches. The incidence of isolated rectal ischemia has not previously been documented. This study reviews the incidence of isolated rectal ischemia after aortic reconstruction.

Methods: All patients who underwent aortic reconstruction from July 1995 to November 2008 at a single institution were prospectively entered into a database. Patients with isolated rectal ischemia were analyzed retrospectively with respect to age, sex, aortic procedure, pathology, and treatment.

Results: During the study period, 2315 patients underwent aortic interventions. Flexible lower endoscopy and/or exploratory laparotomy were performed postoperatively for the assessment of ischemia. Twenty-six patients (1%) had colorectal involvement of bowel ischemia. Twelve patients were excluded due to concurrent left (n = 1), sigmoid (n = 10), or ascending (n = 1) colon involvement. Fourteen patients (0.6%) had findings of isolated rectal ischemia. Six patients (40%) were managed nonoperatively, and eight (57.1%) required operative intervention. The nonoperatively treated patients (4 men, 2 women) were a mean age of 64 years. The operatively treated patients (4 men and 4 women) were a mean age of 79 years.

Conclusions: Rectal ischemia is a rare but under-reported complication after aortic reconstruction. The etiology of isolated rectal ischemia has been attributed to microembolization; however, pathologic examination has not consistently demonstrated this. The etiology of isolated rectal ischemia remains unclear and is presumed to be multifactorial. Clinical suspicion for rectal ischemia, even in the absence of sigmoid or left colonic distribution, should be considered after aortic reconstruction.