

wounds were managed with local wound care. Only one plantar wound resulted in a major limb amputation.

Conclusion: Primary STSG was associated with successful healing in the majority of plantar and nonplantar chronic wounds of the lower extremity, even in patients with diabetes and attendant neuropathy.

Ex Vivo Renal Artery Reconstruction Is the Treatment Of Choice for Complex Renal Artery Pathology

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Objectives: Evaluate long-term outcome of renal revascularization using ex vivo renal artery reconstruction for complex renal artery pathology.

Methods: From 1987-2012, 23 patients (17 women; mean age, 45) with complex renal artery lesions underwent open renal revascularization using ex vivo technique. Underlying disease included fibromuscular dysplasia with aneurysm (11), atherosclerotic aneurysm (6), Takayasu arteritis (3), other (3). Outcomes analyzed included primary, primary assisted and secondary patency rates, antihypertensive medication requirements, renal function/preservation, and mortality. Late graft patency, renal size and cortical thickness were analyzed by serial renal duplex ultrasound examinations.

Results: Twenty-four kidneys in 23 patients were revascularized using ex vivo renal artery reconstructive techniques. Perioperative complications were limited to two patients requiring reoperation for bleeding. Renal function did not change and there were no in-hospital deaths. Over mean follow-up of 44 months, a single bypass graft occluded requiring a redo bypass, which was performed with renal preservation. Primary, primary assisted and secondary patency rates were 94% at 1 and 5 years. Compared to preoperative values, systolic/diastolic blood pressure and the number of antihypertensive medications were reduced ($P < .05$) in the 18 patients with hypertension. Late renal function was preserved as measured by no change in both serum creatinine and eGFR compared to preintervention values ($P = .25$ and $P = .35$, respectively). In addition, there was no difference in treated kidney size or renal cortical thickness on follow-up compared to preoperative measurements ($P = .15$ and $P = .62$, respectively). No patient required dialysis. There were 3 late deaths, none related to the renal procedure, providing 1 and 5-year actuarial survival of 94% and 85%, respectively.

Conclusions: Ex vivo renal artery reconstruction for complex renal artery pathology confers a benefit in blood pressure, while preserving renal mass and function. This technique should be considered the treatment of choice for complex renal artery pathology.

The Low Mortality of Renal Artery Aneurysms (RAA): Is Current Treatment Too Aggressive?

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Objectives: Most studies recommend repair of RAA > 2 cm diameter in asymptomatic patients, but other studies have shown that RAA > 2 cm remain clinically silent over a number of years. We hypothesized that rupture and death in patients with asymptomatic RAA is low, and that current recommendations for RAA treatment at 2 cm may be too aggressive.

Methods: Retrospective review of all RAA treated at a tertiary care medical center from 2002-2012.

Results: Fifty-nine RAA were identified in 40 patients (mean age, 62; M:F, 17:23); 32 were saccular, 7 fusiform, and 5 bilobed. Thirty-seven aneurysms were asymptomatic (ARAA), with the rest being identified during workup for difficult-to-control hypertension ($n = 11$), hematuria ($n = 5$), or flank pain ($n = 3$). Aneurysm location included the main renal artery bifurcation ($n = 36$), main trunk ($n = 8$), primary branch ($n = 6$), pole artery ($n = 4$), and secondary branch ($n = 1$). Ten ARAA were operated on (mean RAA diameter, $2.4 \pm .1$ cm; range, 2-3 cm), with the remaining 27 ARAA being managed conservatively (mean RAA diameter, 1.4 ± 0.1 cm; range, 0.6-2.6 cm). Operative management of ARAA included resection and patch angioplasty ($n = 8$), resection with end-to-end anastomosis ($n = 1$), resection with patch and reimplantation ($n = 1$) and plication ($n = 1$). Mean ARAA patient hospital LOS = 5 days, with a 0% morbidity and mortality rate at 12 months' follow-up. Non-op ARAA patients were followed for up to 14 years (mean, 3 years), with no rupture and 0% mortality. Mean RAA growth rate of patients with multiple imaging studies was 0.7 ± 0.2 mm/yr. No ARAA > 2 cm managed non-operatively ruptured (mean follow-up, 46 months).

Conclusions: The rate of aneurysm rupture and death in our untreated RAA patients is zero, the growth rate is 0.7 ± 0.2 mm/yr, and RAA > 2 cm remained clinically silent for more than 3 years. We may currently be too aggressive in treating asymptomatic RAA.

Vascular Reconstruction During Major Oncologic Pancreatic Resections

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Objectives: There is growing evidence that major vascular reconstruction performed during pancreaticoduodenectomy for malignancy may increase local resectability without increasing morbidity or mortality. The purpose of this study was to evaluate our experience with vascular reconstructions during major pancreatic resections.

Methods: We performed an IRB approved review of patients with planned and unplanned vascular surgery involvement during major pancreatic resections over an 8-year period. We analyzed patient demographics, operative techniques, reconstruction patency, and early and late morbidity and mortality.

Results: Forty-four patients were included in the study. Eighteen (41%) cases were unplanned intraoperative consults, and 7 cases only involved vascular assistance with dissection without reconstruction. Average age of the patients was 64, median operative blood loss was 1.5 liters, and mean operative time was 7.5 hours. Of the 37 patients who underwent vascular reconstruction, 31 (84%) involved portal or superior mesenteric vein, 5 involved the superior mesenteric artery, 3 involved hepatic artery and one involved aortic repair. The majority of reconstructions were either primary repair (29%) or superficial femoral vein graft (32%). Sixty six percent of patients had patent vascular reconstructions on last follow up (mean f/u, 50 weeks). Perioperative mortality was 4%. Median survival for all patients was 37.6 months. Patients with adenocarcinoma (Fig) had a significantly decreased survival compared to other pathologies (16 vs 43.6 months; $P = .015$), although still higher than mean historical survival rates of patients with unresectable pancreatic adenocarcinoma (3-9 months). Postoperative complications related to vascular procedure occurred in 7 (16%) patients. Preoperatively planned vascular involvement showed a trend to improved short-term mortality (11% vs 0%; $P = .08$).

Conclusions: Vascular reconstruction during major pancreatic resections provides good patency with acceptable vascular-related morbidity, and can be considered as an option to increase local resectability and extend survival. Preoperative vascular planning should be considered.

Overall Survival for Adenocarcinoma vs. Other Pathologies

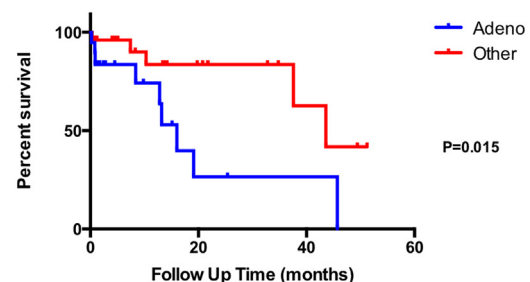


Fig.

Survey of the Initial Cohort of Graduating Integrated 0+5 Residents and Vascular Fellows: Experiences During the Job Hunt

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Objectives: The first two integrated vascular residents in the United States graduated in 2012, and in 2013 eleven more will enter the job market. The purpose of this study was to compare the job search experiences of the first cohort of 0+5 graduates to their counterparts completing 5+2 fellowship programs.

Methods: An anonymous, web-based, 15-question survey was sent to all graduating integrated residents in 2013, as well as the corresponding 5+2 graduating fellows within the same institution. Survey response was nearly 70%.

Results: Survey responses are summarized below in the Table. Overall there was not a significant difference between the training cohorts for open