



The High Risk Recipient

“Up the Lazy River”: Kidney/Pancreas in Recipients with Aortoiliac Disease

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Background: Patients with End Stage Renal Disease (ESRD) and Diabetes Mellitus are at a higher risk of developing peripheral vascular disease including aortoiliac disease. Aortoiliac disease can manifest itself as occlusive or aneurysmal in nature. Patients with ESRD have a higher risk of failed vascular reconstruction and a higher risk of subsequent amputations. Performing a kidney or pancreas transplant is a technically challenging surgical procedure, particularly in the face of pre-existing aortoiliac disease. The iliac arteries are the principal and most commonly used arterial vessels used for inflow during both transplant procedures. Patients with aortoiliac disease that present for transplantation are, as a group, of a particularly high surgical risk. Kidney and pancreas transplant recipients with undiagnosed or pre-existing aortoiliac disease are clearly classed as high risk recipients. This class of transplant recipients is especially challenging for the surgeon, and requires thorough forethought in pre-operative assessment. The surgical approach can be staged (preoperatively) or concomitant with the transplant operations. Transplant recipients that undergo aortoiliac vascular reconstruction during post transplant also demands special strategies to decrease the risk of loss of allografts.

Purpose: The overall purpose of this presentation will be to give an overview of the surgical approach to the high risk transplant recipient with aortoiliac disease.

- 1) Review the preoperative diagnostic evaluation of the aorta and iliac vessels prior to transplantation.
- 2) Discuss the benefits and risks of staged aortoiliac repair prior to transplantation vs. concomitant procedure.
- 3) Discuss the role of endovascular repair in treating this group of patients.
- 4) Discuss intraoperative strategies in the patients with occlusive disease incidentally discovered at the time of surgery.
- 5) Discuss techniques for protecting the transplanted kidney or pancreas during subsequent aortoiliac procedures.
- 6) Review the outcomes of kidney and pancreas transplantation in patients with aortoiliac disease.

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