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Abstract# 354

Kidney Failure Requiring Kidney Transplantation after Pancreas Transplant Alone. N. Nata,¹ E. Huang,¹ M. Kamgar,¹ N. Leeaphorn,¹ C. Parke,¹ C. Schulze,¹ K. Kalantar-Zadeh,² S. Bunnapradist.¹ ¹*Kidney Transplant Research Program, Department of Medicine, Division of Nephrology, David Geffen School of Medicine at UCLA, Los Angeles, CA;* ²*Division of Nephrology and Hypertension, Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center, Torrance, CA.*

BACKGROUND: Pancreas transplant alone (PTA) is usually performed to correct severe metabolic complications in type I diabetic patients with relatively preserved renal function. One of the major concerns about PTA is the development of renal failure following transplantation. Here we reported the cumulative incidence of kidney failure requiring kidney transplantation among PTA recipients in the United States.

METHODS: Using the United Network of Organ Sharing database, all first adult PTA recipients (≥ 18 years old) with estimated baseline glomerular filtration rate (MDRD) > 60 mL/min/1.73m² were selected. The outcome of kidney failure requiring kidney transplantation was defined by the following: wait-listing for kidney transplantation (KT), wait-listing for simultaneous pancreas kidney transplant (SPK), or kidney/SPK transplantation.

RESULT: Among 1,621 first PTA recipients, serum creatinine level at the time of PTA was available in 1,519 patients. Among these, 1,085 patients met the eGFR criteria and were included in the study. The median follow-up time was 1,185 days (25-75%: 522-2,192). One hundred and twenty (11.1 percent) patients developed kidney failure requiring kidney transplantation; of those, 108 (10 percent) were listed and 12 received KT without being listed. Of those waitlisted, 44 received KT, 14 received SPK. The median time to first wait-listing for KT was 2,008 days (25-75%: 1,299-2,770), for SPK was 2,231 days (25-75%: 1,573-2,821), or to kidney transplantation/SPK was 2,047 days (25-75%: 1,493-2,898). The cumulative incidence of placement on the wait-listing at 1, 2, 3, 4 and 5 year after PTA were 0.3, 0.9, 1.9, 4.8 and 8.6% respectively. The cumulative incidence of subsequent renal transplant at 1, 2, 3, 4 and 5 year after PTA were 0.2, 1.3, 2.5, 4.1 and 7.3% respectively.

Conclusion: The majority of PTA recipients had preserved renal function at the time of PTA. Despite this, kidney failure requiring kidney transplantation after PTA within five years was not uncommon. This data suggests there is a