

25 - Title: *Outcomes of geriatric donors for living renal transplant at a single institution*

Authors: Fred Gong, Jennifer Lu, Frank Darras, Adam Kressel

Faculty Mentor: Adam Kressel, MD, PhD

Background: Geriatric patients (> 65 years) with a solitary kidney after donation for transplant have not been well described in the literature. Given the persistent organ shortages and prolonged transplant wait times, geriatric organ donors represent a potentially underutilized population. In this study, we aim to study donor and recipient outcomes of kidney transplants from geriatric donors.

Methods/Research Design: Donor and recipient pairs included if the donor was >65 years old at the time of kidney donation between January 1, 2000 - September 1, 2024. Demographics, surgical factors, and donor and recipient outcomes were collected at 1, 3, 5, and 10 years post-operatively.

Results: Twenty transplant donors were included (40% male, mean age 68 years, mean follow up 7.6 years). The mean baseline creatinine was 0.77 and median serum creatinine at 1 year was 1.29, at 5 years was 1.15, and at 10 years was 1.0. Two donors developed CKD stage IV but none required dialysis. Two expired by the end of the inclusion date (1 from lung cancer, 1 from breast cancer).

Twenty recipients were included (mean age 63.5, 40% hemodialysis dependent). Mean serum creatinine was 1.41 at 1 year, 1.70 at 3 years, and 1.52 at 5 years. Five recipients had a failed transplant with mean time to failure of 5 years. One patient died of operative complications and two additional from metastatic squamous cell carcinoma and COVID-19.

Conclusions: Donors had excellent outcomes with no patients developing ESRD requiring dialysis. Although recipients had higher rates of graft failure compared to population studies, deaths were largely unrelated to kidney transplant. Donors >65 years in good health should be utilized more frequently for living donor organ donation.