As renal transplantation has become the preferred treatment for end-stage renal disease (ESRD), we are transplanting more advanced aged (AA) recipients (>60 years). Our objective was to identify factors associated with high risk of graft failure after renal transplantation (RT) because donor organs represent a scarce resource. We conducted a 10 year retrospective analysis of 1,685 consecutive adult (≥18 years) cadaveric kidney transplants from January 1999 through December 2008 with mean age of 50.8±13.7 years. The impact of 17 recipient variables and 6 donor variables on the primary outcome were tested in exploratory univariate logistic regression analysis. Factors significantly associated with graft failure were entered into a multivariate logistic regression model. There were 500 patients age 60 and older (29.6%). Overall, 324 (19%) grafts failed after RT at a mean follow-up of 4.72±1 year. The mean time to graft failure was 4.86±3.42 years. During the same follow-up, mortality occurred in 393 (23.3%) patients. Five recipient factors were associated with 5-year graft failure in the multivariate model: age, prior transplant, increasing HLA mismatch (HLAMIS), increasing serum creatinine at discharge and delayed graft function. Likewise, only donor expanded criteria was associated with 5-year graft failure. Interestingly, a unit increase (1-year) in recipient age was associated with a 3% decrease in odds of 5-year graft failure (OR=0.97; 95% CI (0.96-0.98); p=<0.0001). Further research is indicated to fully understand the contributors to superior graft survival with advanced age and increased death rates in older transplant patients.

Biography

Marbelly Davila received her PhD degree in Industrial and Systems Engineering from the University of South Florida in 2012. She also holds three master degrees in Mechanical Engineering, Industrial Engineering, and Biomedical Engineering. Before joining Tampa General Hospital in Tampa as a Business Intelligence Analyst, Dr. Davila held for over 15 years a faculty position at the Universidad de Los Andes, Merida, Venezuela. She has taught courses in the areas of systems modeling and performance analysis, operations research, production planning, facilities design, and economics and cost analysis. Her research interests include systems modeling, analysis and control, data analysis and decision support in healthcare and information systems

Jacentha Buggs, MD graduated from medical school in 1993 at Wayne State University School of Medicine in Detroit, Michigan. She then completed both her general surgery residency (1998) and transplant fellowship (2000) at the University of South Florida which is affiliated with five hospitals including Tampa General Hospital. Dr. Buggs has also served as the Allied Health and Continuing Education Officer for Hillsborough Community College. Dr. Buggs is involved in multiple research projects including but not limited to the expression of nNOS protein and the regulation of hypertension, renal artery stenosis in living kidney transplant patients, the use of bovine carotid artery dialysis access as a bridge to transplantation, and bystander CPR to increase the donor pool for solid organ transplantation.