

leucine and isoleucine), and the mitochondrial dysfunction biomarker, citrate. The utility of this biomarker risk score has not been determined in solid organ transplantation cohorts. We aimed to evaluate the prognostic value of MVX in kidney transplant recipients (KTRs).

Methods: MVX was measured in fasting EDTA plasma samples using nuclear magnetic resonance (NMR) spectroscopy. Data and

samples were derived from two non-overlapping cohorts (initiated in 2008 and 2015, respectively) within the TransplantLines Biobank and Cohort Programme (Groningen, The Netherlands).

Results: In the first cohort, MVX was evaluated in 690 KTRs (57% male, age 53 ± 13 years, estimated glomerular filtration rate (eGFR) 45 ± 19 mL/min/1.73m²) at a median of 5.4 (interquartile range 1.9 - 12.0) years after transplantation. During follow-up, 147 deaths and 84 graft failure events were observed. Mean MVX score was 51.1 ± 10.5 arbitrary units. MVX was positively associated with age, history of cardiovascular disease, serum creatinine, leukocytes, high-sensitivity CRP and use of calcineurin inhibitors. MVX was inversely associated with serum albumin, total cholesterol and 24-hour urinary urea excretion. Cox regression analyses revealed an association of MVX with all-cause mortality (hazard ratio per standard deviation (HR per SD), 1.48; 95% confidence interval (CI) 1.23 to 1.78; $p < 0.001$), adjusted for age, sex, eGFR and 24hour urinary protein excretion. Addition of MVX to the previous model yielded an improvement in c-index from 0.731 ± 0.020 to 0.754 ± 0.012 . MVX was not associated with graft failure. Regarding the two main MVX components, both the Inflammation Vulnerability Index (IVX; comprised of GlycA and small HDL) and the Metabolic Malnutrition Index

(MMX; comprised of valine, leucine, isoleucine and citrate) were each independently associated with mortality: HR per SD, 1.45; 95% CI 1.22 to 1.73; $p < 0.001$ and HR per SD, 1.22; 95% CI 1.04 to 1.44; $p = 0.016$, respectively. These results were independently replicated in a second, non-overlapping cohort of 943 KTRs (61% male, age 55 ± 14 years, eGFR 49 ± 18) which showed similarly strong and independent associations of MVX with mortality (HR per SD 1.80; 95% CI 1.45 to 2.23; $p < 0.001$; C-index increase from 0.750 ± 0.023 to 0.794 ± 0.020).

Conclusions: Both MVX and its main components are independently associated with mortality in two large independent cohorts of KTRs. These results highlight the potential value of MVX to identify individuals at risk of premature mortality after kidney transplantation.

I have no potential conflict of interest to disclose.

WCN24-1675

ACUTE NECROTIZING ULCERATIVE GINGIVITIS IN KIDNEY TRANSPLANTATION: A CASE REPORT



KLEBSON FELLIPE FEIJÓ DE MELO^{*1}, MARCLEBIO DOURADO², DIOGO CABRAL², LARISSA ANDRADE², GILBERTO FILHO³

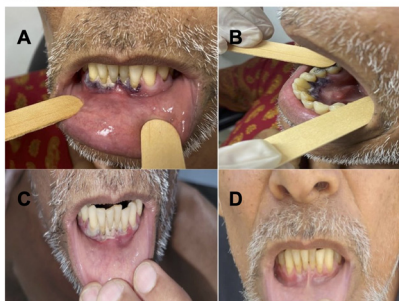
¹RECIFE, Nephrology, Brazil; ²Nephrology, HOSPITAL DAS CLINICAS, FEDERAL UNIVERSITY OF PERNAMBUCO, RECIFE, ³Oral and Maxillofacial Surgery, HOSPITAL DAS CLINICAS, FEDERAL UNIVERSITY OF PERNAMBUCO, Recife

Introduction:

Methods:

Results:

Clinical Evolution



A (Admission), B (fifth day of hospitalization), C (Seventh day, discharged from hospital), D (Ambulatory follow-up)

Conclusions:

I have no potential conflict of interest to disclose.

WCN24-1676

RESULTS OF A KIDNEY TRANSPLANT PROGRAM AT AN CLINIC IN THE COLOMBIAN CARIBBEAN REGION – 2019 TO 2022



Henry Joseth González-Torres^{*1}, Leinad Yamile Moran Marin², Gustavo José Aroca Martínez², Adriana Isabel Agamez Díaz², Alex Alfredo Dominguez Vargas², Omar de Jesus Cabarcas Barbosa², Sandra Yolima Hernandez Agudelo²

¹Barranquilla, Facultad de Ciencias de la Salud, Colombia, ²Facultad de Ciencias de la Salud, Universidad Simón Bolívar, Barranquilla

Introduction: Kidney transplantation is an effective treatment option and, in many cases, the best option for patients with end-stage renal disease. However, it still faces significant challenges that need to be addressed to improve the quality of life and survival of transplant recipients. Therefore, follow-up programs for these renal patients are essential. Hence, the objective of this study was to evaluate the outcomes of a kidney transplant program in a clinic in the Colombian Caribbean Region between the years 2019 and 2022.

Methods: An analytical cohort study was conducted, with a summary review of the variables, reported in means and standard deviations or medians and interquartile ranges depending on the normality of the variable. On the other hand, categorical variables were described using absolute and relative frequencies. The Student's t-test or Wilcoxon test was used depending on the normality of the variable. The Kruskal-Wallis test was employed to evaluate the medians obtained by patients in the Glomerular Filtration Rate (GFR) across four measurements. To analyze categorical variables, the exact Fisher test or the Chi-square test was used. A Kaplan-Meier analysis was performed to estimate graft survival according to donor type. A pvalue of <0.05 was considered statistically significant. The R-CRAN software version 4.3.2 was used for statistical analyses.

Results: In this study, which included 164 patients from the kidney transplant program, it was observed that the majority of participants were male (62%). Hypertension was the most common comorbidity (77%), followed by type 2 diabetes (16%). Regarding primary kidney diseases, Nephroangiosclerosis (NAH) (20%) and Diabetic Nephropathy (DN) (16%) were the most frequent. Approximately half of the transplants were performed with cadaveric donors (49%) and living donors (51%). The prevalences of graft loss and mortality were 8.5% and 2.4%, respectively. In the gender analysis, it was found that men had a higher prevalence of type 2 diabetes, while women had more hypertension. However, there were no statistically significant differences in primary kidney disease, GFR, donor type, Anti-HLA antibodies, graft loss, or mortality ($p > 0.05$). When comparing donor type, it was observed that patients with cadaveric donors had a lower GFR in the last measurement and a longer cold ischemia time. However, there were no statistically significant differences in comorbidities, primary kidney disease, Anti-HLA antibodies, number of HLA matches, graft loss, or mortality ($p > 0.05$). In the Kaplan-Meier analysis, the probability of 10-year graft survival was significantly higher in patients who received a transplant from a cadaveric donor compared to those who received a transplant from a living donor (89% vs. 60%), respectively. In this study, differences in GFR, cold ischemia time, and donor type were relevant findings for kidney transplant management.

Conclusions: The 10-year graft survival was notably higher in patients who received transplants from deceased donors, emphasizing the importance of this source of organs in the transplant program. This indicates that the management of kidney transplants in the Colombian Caribbean Region should be improved and optimized with the aim of benefiting a greater number of patients in the future.

I have no potential conflict of interest to disclose.

WCN24-1680

PREVALENCE AND CLINICAL CHARACTERISTICS OF KIDNEY TRANSPLANTS IN COMPLEMENT 3 GLOMERULOPATHY PATIENTS: RESULTS FROM A REAL-WORLD, MULTI-COUNTRY SURVEY



Richard Lafayette^{*1}, Raisa Sidhu², Clare Proudfoot², Katharina Pannag³, Briana Ndife⁴, Serge Smeets², Kathleen Murphy⁴, Raymond Przybysz⁴, Jonathan de Courcy⁵, Susanna Libby⁵, Smeeta Sinha⁶