RIESGO DE DIÁLISIS SEGÚN LA ECUACIÓN DE RIESGO DE INSUFICIENCIA RENAL (KFRE) EN PACIENTES CON ENFERMEDAD RENAL CRÓNICA INSCRITOS EN UN PROGRAMA DE NEFROPROTECCIÓN EN LA GUAJIRA (COLOMBIA) ENTRE 2021 Y 2023

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RESUMEN

La Enfermedad Renal Crónica (ERC) es una condición progresiva y a largo plazo caracterizada por un deterioro gradual e irreversible de la función renal. En sus etapas iniciales, es un proceso lento y silencioso que conduce a una disminución en la tasa estimada de filtración glomerular (eGFR), una medida de la función renal.

Objetivo: Evaluar el riesgo para requerir terapia de reemplazo renal según la Ecuación de Riesgo de Fallo Renal (KFRE, por sus siglas en inglés) en pacientes con Enfermedad Renal Crónica inscritos en un programa de nefroprotección en La Guajira (CO) entre los años 2021 y 2023.

Métodos: Se realizó un estudio analítico, donde las variables se describieron de manera descriptiva en términos de medidas de tendencia central. Las variables cuantitativas fueron descritas y se utilizó la prueba t de Student o la prueba de Wilcoxon, según la normalidad de la variable. Por otro lado, se utilizó la prueba de Kruskal-Wallis para evaluar la función renal según las categorías de riesgo de ASCVD (Bajo, Moderado, Alto). Asimismo, se exploró la relación entre la albuminuria y la puntuación de riesgo de ASCVD mediante la correlación de Spearman. Para relacionar las categorías de riesgo de KFRE (Bajo, Moderado, Alto) y las categorías de riesgo de ASCVD (Bajo, Moderado, Alto), se realizó un análisis de correspondencia. Se aplicó la prueba exacta de Fisher o la prueba de Chi-cuadrado para analizar variables categóricas. El software estadístico utilizado fue R-CRAN versión 4.3.2.

Resultados: Este estudio incluyó a 847 pacientes del programa de nefroprotección. Se observó que la mayoría de los pacientes eran mujeres, con una edad promedio de 65 años. La hipertensión arterial (HTA) fue la comorbilidad más común, seguida de la obesidad y la dislipidemia. En términos de etapas de ERC, la etapa G2 fue la más común. Cuando se analizaron los parámetros clínicos y bioquímicos por género, se observaron diferencias significativas, con tasas más altas de obesidad y dislipidemia en pacientes mujeres. También se observaron diferencias en los niveles de hemoglobina y perfil lipídico, con mujeres que tenían niveles significativamente más altos de colesterol y LDL, mientras que los hombres tenían niveles más altos de HDL y hemoglobina. Al evaluar el riesgo renal con la fórmula KFRE, se encontró que los pacientes hombres tenían un riesgo significativamente más alto a los 2 y 5 años en comparación con las pacientes mujeres. Sin embargo, no hubo diferencias significativas en las categorías de riesgo de KFRE entre los géneros. Además, se analizó el riesgo cardiovascular utilizando la fórmula ASCVD de ACC/AHA, y se encontró que las pacientes mujeres tenían una mayor prevalencia en las categorías de riesgo cardiovascular, y se observó una correlación positiva débil entre los niveles de albuminuria y el riesgo cardiovascular. Finalmente, se exploró la relación entre el riesgo renal de KFRE y el riesgo cardiovascular de ASCVD, revelando una correlación positiva débil entre estos dos riesgos.

Conclusiones: Estos hallazgos resaltan la importancia de considerar las diferencias de género y las relaciones entre los factores de riesgo en el cuidado de pacientes con enfermedad renal crónica y su riesgo cardiovascular.

Palabras clave: Enfermedad Renal Crónica; Tasa de Filtración Glomerular; Nefroprotección; Riesgo Cardiovascular; Albuminuria.

ABSTRACT

Chronic Kidney Disease (CKD) is a progressive, long-term condition characterized by a gradual and irreversible deterioration of renal function. In its early stages, it is a slow and silent process, leading to a decrease in the estimated glomerular filtration rate (eGFR), a measure of kidney function. Therefore, the objective was to monitor the risk profiles for requiring renal replacement therapy according to the Kidney Failure Risk Equation (KFRE) in patients with chronic kidney disease enrolled in a nephroprotection program in La Guajira (CO) between the years 2021 and 2023.

Methods: An analytical study was conducted, where variables were described descriptively in terms of central tendency measures. Quantitative variables were described, and either the Student's t-test or the Wilcoxon test was used, depending on the normality of the variable. On the other hand, the Kruskal-Wallis test was used to assess kidney function according to ASCVD risk categories (Low, Moderate, High). Likewise, the relationship between albuminuria and ASCVD risk score was explored through Spearman correlation. To relate KFRE risk categories (Low, Moderate, High) and ASCVD risk categories (Low, Moderate, High), a correspondence analysis was performed. The Fisher exact test or Chi-square test was applied to analyze categorical variables. The statistical software used was R-CRAN version 4.3.2.

Results: This study included 847 patients from the Nephroprotection program. It was observed that the majority of patients were female, with an average age of 65 years. Hypertension (HTA) was the most common comorbidity, followed by obesity and dyslipidemia. In terms of CKD stages, stage G2 was the most common. When clinical and biochemical parameters were analyzed by gender, significant differences were observed, with higher rates of obesity and dyslipidemia in female patients. Differences were also observed in hemoglobin levels and lipid profile, with females having significantly higher levels of cholesterol and LDL, while males had higher levels of HDL and hemoglobin. When evaluating renal risk with the KFRE formula, it was found that male patients had a significantly higher risk at 2 and 5 years compared to female patients. However, there were no significant differences in KFRE risk categories between sexes. Additionally, cardiovascular risk was

analyzed using the ASCVD formula from ACC/AHA, and it was found that female patients had a higher prevalence in cardiovascular risk categories, and a weak positive correlation was observed between albuminuria levels and cardiovascular risk. Finally, the relationship between KFRE renal risk and ASCVD cardiovascular risk was explored, revealing a weak positive correlation between these two risks.

Conclusions: These findings highlight the importance of considering gender differences and risk factor relationships in the care of patients with chronic kidney disease and their cardiovascular risk.

Keywords: Chronic Kidney Disease; Glomerular Filtration Rate; Nephroprotection; Cardiovascular Risk; Albuminuria

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