01. Complications of Nephrotic Syndrome in Children in Tertiary Hospital of Rwanda, Kigali, University Teaching Hospital of Kigali (CHUK): 2019-2025

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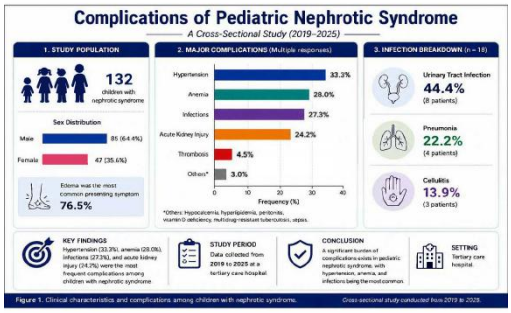
Introduction: Nephrotic Syndrome (NS) in children is characterized by massive proteinuria, hypoalbuminemia, and edema, and are associated with both disease- and treatment-related complications. Early detection and proper management are important to reduce morbidity and improve outcomes. **Aim:** This study assessed the prevalence and pattern of complications in children with nephrotic syndrome treated at CHUK between 2019 and 2025. **Methods:** A retrospective cross-sectional study was conducted using medical records of children diagnosed with nephrotic syndrome at the University Teaching Hospital of Kigali between 2019 and 2025. All eligible patient records were included using a total population sampling technique, resulting in a total sample size of 132 patients. Data were collected using a structured data extraction tool and processed using IBM SPSS Statistics. Descriptive statistics were used to summarize patients' characteristics, complications and laboratory findings. Association between variables was assessed using logistic regression, with a p-value < 0.05 considered statistically significant. **Results:** Most patients (64.4%) were male. Edema was the most common clinical presentation occurring in 76.5% of cases. The most frequent complications included anemia (28.0%), hypertension (33.3%), and infections (27.3%), mainly urinary tract infections. 11.4% of individuals developed chronic kidney disease, while 24.2% of cases had acute kidney injury. Anemia (OR = 2.41, p = 0.016), hypercholesterolemia (OR = 2.09, p = 0.047), and hypoalbuminemia (OR = 3.18, p = 0.002) were all significantly associated with the complications. The mortality rate was 3.0%, and poor outcomes were linked to CKD stage. **Conclusion:** Children with nephrotic syndrome at CHUK experience a substantial burden of complications, particularly hypertension, anemia, infections, acute kidney injury and chronic kidney disease, highlighting the high morbidity among children with nephrotic syndrome at CHUK. Most laboratory abnormalities were associated with higher rates of complications, suggesting that more severe biochemical derangements are linked to worse clinical outcomes. These findings supports the need for early detection, strengthened clinical monitoring and targeted management strategies. **Key Words:** Acute Kidney Injury (AKI), Complications, Hypertension, Infections, Nephrotic syndrome



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