

Patterns, Triggers, and Predictors of Relapses among Children with Steroid Sensitive Idiopathic Nephrotic Syndrome at the University of Abuja Teaching Hospital, Gwagwalada, Abuja, Nigeria

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Abstract : Background: Childhood steroid-sensitive idiopathic nephrotic syndrome (SSINS) is plagued with relapses that contribute to its morbidity and the cost of treatment. Materials and Methods: This is a retrospective review of relapses among children with SSINS at the University of Abuja Teaching Hospital from January 2016 to July 2020. Triggers related to relapse incidents were noted. Chi-square test was deployed for predictors (factors at the first clinical presentations that associate with subsequent relapses) of relapses. Predictors with p-values of less than 0.05 were considered significant and 95% confidence intervals (CI) and odd ratio (OR) were described. Results: Sixty SSINS comprising 52 males (86.7%), aged 23 months to 18 years, with a mean age of 7.04 ± 4.16 years were studied. Thirty-eight (63.3%) subjects had 126 relapses including infrequent relapses in 30 (78.9%) and frequent relapses in 8 (21.1%). The commonest triggers were acute upper respiratory tract infections (68, 53.9%) and urinary tract infections (UTIs) in 25 (19.8%) relapses. In 4 (3.2%) relapses, no trigger was identified. The time-to-first relapse ranged 14 days to 365 days with a median time of 60 days. The significant predictors were hypertension (OR=3.4, 95% CI; 1.04-11.09, $p=0.038$), UTIs (OR=9.9, 95% CI; 1.16-80.71, $p=0.014$), malaria fever (OR=8.0, 95% CI; 2.45-26.38, $p<0.001$), micro-haematuria (OR=4.9, 95% CI; 1.58-15.16, $p=0.004$), elevated serum creatinine (OR=12.3, 95%CI; 1.48-101.20, $p=0.005$) and hypercholesterolaemia (OR=4.1, 95%CI; 1.35-12.63, $p=0.011$). Conclusion: While the pathogenesis of relapses remains unknown, it is prudent to consider relapse-specific preventive strategies against triggers and predictors of relapses in our setting.

Keywords : Patterns, triggers, predictors, steroid-sensitive idiopathic nephrotic syndrome, relapses, Nigeria

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