Fourth Paper

Title: Antithrombin III Level in Children with Nephrotic Syndrome, its correlation to thromboembolic complications and serum albumin level

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ABSTRACT: Nephrotic syndrome (NS) is one of the most common pediatric diseases with many complications. Thromboembolic complication is the most serious complication. The aim of this study was to predict the possible risk of thromboembolic complication development in children with NS due to antithrombin III deficiency. This study was conducted in the Outpatient Nephrology Clinic of Children's Hospital in Fayoum University Hospital. It included 27 children with NS and 27 healthy children as a control group in an analytic study with cross-sectional comparative design. Laboratory investigations were done in the form of complete blood picture, serum levels of albumin, total protein, creatinine, urea, cholesterol, triglycerides, urine analysis, albumin/creatinine ratio, prothrombin time, and INR. The serum antithrombin III level was measured by double ELISA technique. Data analysis was performed using the Statistical Package for the Social Sciences software version 18. Student's *t*-test was used to compare measures of two independent groups of quantitative data. One-way ANOVA test was used to compare more than two independent groups of quantitative data. Kruskal–Wallis test was used in comparing more than two independent nonparametric groups. Bivariate Pearson correlation test was used to test the association between variables. The level $P \leq 0.05$ was considered significant. There were significant decreases in antithrombin III, albumin, and total protein levels in the study group during relapse and improved after steroid. There were no thromboembolic complications detected.