

البحث السابع :

عنوان البحث باللغة الانجليزية:

Antithrombin III Level in Children with Nephrotic Syndrome, Its Correlation to Thromboembolic Complications and Serum Albumin Level

Article 7

Nephrotic syndrome is one of the commonest pediatric diseases with many complications. Thromboembolic complication is the most serious complication. Aims: The aim was to predict the possible risk of thromboembolic complication development in children with nephrotic syndrome due to antithrombin III deficiency. Settings and Design: This study was conducted in outpatient Nephrology Clinic of Children's Hospital in Fayoum University Hospital. It included 27 children with nephrotic syndrome and 27 healthy children as control group in analytic study with cross sectional comparative design. Methods and Material: 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. Serum antithrombin III level with double-sandwich ELISA technique. Statistical Analysis: Data analysis was performed using Statistical Package for the Social Sciences software version 18. Independent student t-Test was used to compare measures of two independent groups of quantitative data. One way ANOVA test in comparing more than two independent groups of quantitative data. Kruskal Wallis test used in comparing more than two independent nonparametric groups. Bivariate pearson correlation test to test association between variables. The level P value ≤ 0.05 was considered significance. Results: There were significant decreases in antithrombin III, albumin and total proteins levels in the study group during relapse and improved after steroid. There were no thromboembolic complications detected among the study group. Conclusions: Nephrotic syndrome causes heavy proteinuria with loss of many important proteins as antithrombin III. Serum antithrombin III level is significantly decreased in children with nephrotic syndrome and it correlated with serum albumin. Although the patient in study have thrombocytosis, hypercholesterolemia and decreased serum level of antithrombin III,

none of them showed thrombotic complication so, thromboembolism is rare in children with nephrotic syndrome may be due to early diagnosis and proper treatment.