



Title of Thesis: Evaluation of carotid intima media thickness in children with idiopathic nephrotic syndrome

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ABSTRACT

Nephrotic syndrome (NS) is one of the commonest renal disorders in children. The clinical features of NS include massive proteinuria, hypoalbuminemia and generalized edema. It is associated with an atherogenic lipoprotein profile. Increased CIMT has been accepted as a reliable marker for atherosclerosis. There are only few studies that investigated CIMT in children with nephrotic syndrome. This study was undertaken to evaluate the CIMT in children with idiopathic nephrotic syndrome and assess different risk factors that could affect CIMT. It was conducted at Fayoum university hospital, Egypt between November 2021 and July 2022. Children with nephrotic syndrome as the cases group (n=40) and age- and sex-matched healthy children as a control group (n=30) were enrolled.

CIMT measurement by ultrasound was performed by an experienced radiologist. CIMT among cases was significantly higher than in controls across all age groups. Patients receiving non-steroid immunosuppressive agents had significantly higher CIMT than those receiving steroids alone. CIMT was found to be significantly correlated to advancing patients' age, BMI, duration of the disease, number of relapses and diastolic blood pressure. However, it's not correlated to total cholesterol or TG levels. As increased CIMT is a surrogate marker of atherosclerosis in children, the assessment of CIMT can be of benefit on the long term care of patients with NS.