



# **Serum Neopterin Level in Children with Attention Deficit Hyperactivity Disorder and Autistic Spectrum Disorder**

Thesis

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Pediatric Medicine

By

**Hanaa Hanafi Ahmed Ismail**

(M.B.B.CH)

Faculty of Medicine - Fayoum University

*Supervised By*

***Prof. Hadeer Mahmoud Gamal El-Deen Abd El-Ghaffar***

Professor of Pediatrics

Faculty of Medicine-Fayoum University

**Dr. Noha Khalifa Abdelghaffar**

Assistant professor of Clinical Pathology

Faculty of Medicine-Fayoum University

**Dr. Mariam Ehab Dawoud**

Lecturer of Psychiatry

Faculty of Medicine-Fayoum University

Pediatric Department  
Faculty of Medicine - Fayoum University

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**Department:** Pediatrics

**ABSTRACT**

**Introduction:** There is evidence supporting that cellular immunity may play a role in the pathophysiology of ASD and ADHD. Neopterin is a marker of inflammation, immune system activation known to be involved in pathophysiology of ASD and ADHD.

**Objective:** To assess the serum neopterin level in children with ASD and ADHD and to assess correlation between neopterin level and severity of ASD and ADHD symptoms.

**Patients and Methods:** 25 patients with ASD and 25 patients of ADHD and 25 healthy controls matched in age and sex .ADHD group was assessed with Conners parent rated scale , ASD group was assessed with Childhood Autism Rating Scale .Also level of plasma Neopterin measured by ELISA technique.

**Results:** There was statistically significant negative correlation regarding serum Neopterin level and age in ASD patients. There was no statistically significant difference in Neopterin level in both ASD and ADHD. There was no statistically significant difference in Neopterin level and severity of symptoms in both ASD and ADHD patients.

**Conclusions:** we evaluated serum Neopterin as a marker of inflammation and we found no statistically significant difference in serum Neopterin level in both groups .