

البحث الثاني

أسم الطبيب المتقدم	مريم ايهاب داود يعقوب
عنوان البحث بالإنجليزية	Study of serum neopterin in children with attention deficit hyperactivity disorder and autistic spectrum disorder Fayoum Governorate, Egypt
عنوان البحث بالعربية	دراسة النيوپترين في الدم لدى الأطفال المصابين باضطراب فرط الحركة وقصور الانتباه واضطراب طيف التوحد: محافظة الفيوم. مصر
أسماء الباحثين	أ.د. هدير محمود جمال الدين عبد الغفار* - أ.د. نهى خليفة عبد الغفار** - د. هناء حنفى احمد*** د. مريم ايهاب داود*** * قسم طب الأطفال - كلية الطب - جامعة الفيوم , ** قسم الباثولوجيا الأكلينيكية - كلية الطب - جامعة الفيوم , *** قسم النفسي - كلية الطب - جامعة الفيوم
مكان النشر	<i>Egyptian Journal of Neurology, Psychiatry and Neurosurgery</i> (2022) 58:13 https://doi.org/10.1186/s41983-022-00448-y
تاريخ النشر	2 February 2022

Research No(2):Single author

Study of serum neopterin in children with attention deficit hyperactivity disorder and autistic spectrum disorder: Fayoum Governorate, Egypt

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Background: There is evidence supporting that cellular immunity may play a role in the pathophysiology of autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD). Neopterin, a pteridine mainly synthesized by activated macrophages, is a marker of inflammation, immune system activation that may be involved in the pathophysiology of both disorders.

Methods: Fifty drug-naïve patients were diagnosed according to DSM-5 (25 with ASD, 25 with ADHD), in addition to 25 healthy volunteers matched in age and gender with the patients were included. The CARS, Conners' scales used to assess the severity of the disorders, respectively. Serum neopterin level was measured using ELISA technique for all participants.



Results: Statistically nonsignificant difference in mean neopterin level between control and both patients groups with significant negative correlation between neopterin level and younger ages in ASD group were found. Statistically nonsignificant difference also was found between its levels among subtypes of ADHD as well and with the degree of ASD symptoms severity.

Conclusions: There was no statistically significant difference between serum neopterin level in ADHD, ASD patients groups and control group reference.

Keywords: ASD, ADHD, Neopterin