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INTESTINAL PARASITIC INFECTIONS AND ATOPIC DISEASES IN CHILDREN: A HOSPITAL BASED STUDY

Abstract

Different helminth parasites may have different effects on allergy depending on the timing of the exposure. A meta-analysis of many of studies reported the association between the presence of geohelminth eggs in stool samples and asthma provided some evidence for parasite-specific effects. This study evaluated the occurrence of allergy among different intestinal parasitic infected patients. A cross sectional study was carried out from June, ٢٠١٣ to October, ٢٠١٣ in the Pediatric Outpatient Clinic of Al-Fayoum University Hospitals among ٥٥ children aged ٢ years to ١٣ years. The data were collected using ISSAC questionnaire of allergy (International Study of Asthma and Allergies in Childhood) also laboratory analysis of complete blood picture, stool analysis and measurement of total serum IgE were performed for the patients. Among the patients ٢٧ suffered from allergy and ٢٨ had no allergic complain. Stool examinations showed *Entrobium vermicularis* (١٥), *Trichostrongylus* species (٩), *Hymenolepis nana* (٨), *Entameba histolytica* (٨), *Giardia lamblia* (٦), and mixed infections (٩). The allergic group by parasitological examination ٧ children (٢٥.٩%) had *Entrobium vermicularis*; ٦ children (٢٢.٢%) *Entameba histolytica*; and ٣ children (١١.١%) *Giardia lamblia*, with eosinophilic count was higher in the enterobiasis infected children than in protozoa infected ones. There were significantly high IgE levels in mixed parasitic infection ($P= ٠.٠٠٦$) and with *Entrobium vermicularis* infections ($P=٠.٠٤$). Also statistically significant difference between allergic groups by ISAAC score and the non allergic group regarding Ig E levels ($P= ٠.٠٣$). There was no significant difference between numbers of children with allergy and those without allergy among different parasitic infections. However, a marked significant association between the allergy and parasitic infected children was not declaimed.

Keywords: Al-Fayoum, Children, Allergy, parasitosis