

( 2002/6/18 2001/10/14 )

235

%3.63 *Giardia lamblia* :  
 %2.13 *E. histolytica* %2.98 *Entamoeba coli*  
 %2.13 *Hymenolepis nana* %4.68 *Enterobius vermicularis*  
 %15.74

## **The Role of Fingernails in Trasmitting The Infection With Intestinal Parasites Among Pupils of Primary Schools in Al-Taamem Province-Iraq**

**Ibraheem A. Abdullah      Hider M. Al-Shirifi**

*Department of Biology  
 College of Education  
 Mosul University*

### **ABSTRACT**

Results of examining 235 fingernails from pupils of a number of primary schools in urban and rural regions of Al-Taamem province, by floatation in zinc sulphate solution, revealed the presence of infective stages of the following intestinal parasites: cysts of *Giardia lamblia* 3.83% , *Entamoeba coli* 2.98% , *E. histolytica* 2.13% , eggs of *Enterobius vermicularis* 4.68% and *Hymenolepis nana* 2.13% . The total percentage of infection was 15.74%, emphasizing the role of fingernail in trasmission of parasitic infection , which requires its continous cleaning and cutting.

Intestinal parasites

; Brown and Faust et al., 1975 ; Belding, 1965)

.( Neva, 1983 ;Garcia and Bruckner,1993

*Enterobius vermicularis*

*E. coli*

*Entamoeba histolytica*

*Hymenolepis nana*

*Giardia lamblia*

. (Garcia and Bruckner, 1993) Careless

(2001 1998 )

235

1999  
5

1998

.( Formal saline %10 )

3 / 1000

.(Faust et al., 1975)

Lugol's iodine

.(1984 )

(X<sup>2</sup>)



%2.98 ( %2.55 %1.28) %3.83  
 %1.70 %0.43) %2.13 ( %1.70 %1.28)  
 .(

(Roche and Benito,

.1999)

%2.55) %4.68

.( %2.13

(Fan, 1998)

%1.70) %2.13

. (Belding, 1965)  
 (1998)

( %0.43

Herrstrom et al.(1997)

10-4

%21

Finger biting

Finger sucking

.(1990

1985

Brown and Neva, 1983 )

( %5.96 %2.98) %8.94

(%3.40 %1.28) %4.68 (%2.55 %1.71) %4.26

( %2.55 %4.26) %6.81

.( %2.13) %4.26 ( %0.43 %2.12) %2.55

P = 0.05

(Al-Abaidy, 1998)

.1985  
 . 516 .  
 .1998  
 . 117 . -  
 469 . .1984  
 .2001  
 . 81 .  
 .1990  
 . 366 .

- Al-Abiady, N.A.K., 1988. The correlation of helminthic ova and protozoan cysts in human and in dust in and around houses in some villages around Mosul. M.Sc. Thesis. Coll. of Med. Univ. Mosul. 85 p.
- Belding, D.L., 1965. Textbook of Parasitology. 3<sup>rd</sup> ed., Appleton. Century-Crofts. New York.1374 p.
- Brown, H.W. and Neva, F.A., 1983. Basic Clinical Parasitology. Appleton Century-Crofts, New York.339 p.
- Fan, P.C., 1998. Review of enterobiasis in Tiwan and offshore Islands. J. Microbiol.Immunol. Infect.,31: pp.203-210.
- Faust, E.C., Beaver, P.C. and Jung, R.C., 1975. Animal Agents and Vectors of Human Disease. 4<sup>th</sup> ed., Lea & Febiger. Philadelphia.479 p.
- Garcia, L.S. and Bruckner, D.A., 1993. Diagnostic Medical Parasitology. 2<sup>nd</sup> ed., Wanshington. D.C.764 p.
- Herrstrom, P., Fristrom, A., Karlsson, A. and Hogsted, B., 1997. *Enterobius vermicularis* and finger sucking in young Swedish children. Scandinavian J. Primary-Health-Care, 15(3): pp.146-148.
- Roche, J. and Benito, A., 1990. Prevalence of intestinal parasites with special reference to *Entamoeba histolytica* on the Island of Bioko (Equatorial Guinea). Am. J. Trop. Med. Hyg., 60(2): pp.257-262.