

# INCIDENCE OF CRYPTOSPORIDIOSIS INFECTION: REVIEW

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### **Abstract**

The parasite is one of the most important parasites spread in the world and the most important symptom caused by watery diarrhea in addition to severe abdominal pain in critical cases or not treated, and also for people who suffer from an imbalance in the immune system, this parasite is taken by contaminating water or food with the oocysts of this parasite, and the appearance of symptoms varies from person to person according to the amount of the parasite taken and the immune system and the health of the host mainly and this parasite is considered a parasite that infects humans and animals, we studied this study from a group of several studies conducted in Iraq and neighboring countries to find out the prevalence of this parasite cryptosporidiosis.

Keywords: cryptosporidiosis; oocysts; Iraq.

# Introduction

This parasite is one of the parasites that infect the digestive system, which causes watery diarrhea, and people who are more vulnerable to this parasite in general are those who suffer from an imbalance in the immune system[1 and 2], and this parasite may threaten the lives of people when the infected person does not take treatment to get rid of this parasite, the way of infection Way is fecal—oral [3].

This study was published in 1994 on the percentage of parasite infestation in northern Jordan for primary schools, and it was diagnosed by different methods, which showed that 40 infected samples out of a total of 1000 stool samples from children who suffer from symptoms or do not suffer any symptoms from the age group 6-14 years, and this study showed that The most vulnerable group is children under the age of nine and in rural areas as well[4 and 5].

In Malaysia, When examining the microscopy and PCR techniques, it was found that the number of infections in hospitalized children was 0.9% who had signs of diarrhea[6].

In Iraq in the year 1994, 240 samples were collected from the stool of children under the age of five who suffer from abdominal pain and vomiting, and examined with a dye assigned to this parasite, which was 18.3% of the persons who took the sample.[7]. In 2010, 95 stool samples were taken from children in Iraq from the age of one month to 12 years, and the sample was stained by modified Ziehl-Neelsen acid-fast stain and Auramine O techniques the result was 18.9%.[8].

This researcher[9] used this test (immunofluorescence) in north Jordan to detect the parasite who is most sensitive to it and who found the infection rate was (37.3%) taken from 112 samples of children under the 12 age.

The results of the researcher in India [10] was when examining 175 children under the age of five suffering from diarrhea, and the result was 48 (27.4%).

This study[11] was conducted in Gaza, Palestine, for children for the year 2005, where 416 samples were examined by two methods. The result of the staining test was 62 (14.9%), and it was using the ELISA kit test 68 (16.3%).

In Iraq[12 an 13], these researchers have reported the rate of parasite infestation by using the modified Ziehl-Neelsen staining, and the rate of infection with this parasite was 8.8% and 9.7%, respectively.

In Yemen[14], 712 samples were collected from children from the one month age of 12 years old in 2006-2007 by ELISA kits was 26.1%.

Researchers in Egypt [15] found the prevalence of the parasite in Egypt, and they also did a molecular diagnosis.

Samples were collected from 374 fecal samples from dogs of different ages in the year (2008-2009). These samples were examined by ELISA technique, and the prevalence rate of this parasite was 52.7% (197/374).[16].

These samples were collected from cats suffering from digestive symptoms, the number of samples was 1355 to search for the parasites that cause these symptoms, and the result of infection with the parasite of 13 cats in the year (2003-2005)[17].

### Conclusion

In our study, after reviewing the studies of researchers who tracked the spread of the parasite in Iraq and other countries, we found that the prevalence rate is not small and that for several reasons, including the parasite tolerates unfavorable conditions and also produces a large percentage of infected people and is also a common parasite between human and animals.

A study was taken of the prevalence of the parasite in dogs and cats and that because it is one of the animals that humans interact with most, and this affects the rate of spread of the parasite due to direct contact between humans and animals.

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