Prevalence of Cryptosporidium among Diarrheic Children Hospitalized in Gonbad Kavus City, 2011

Abstract

Background and Objective: Cryptosporidium is a common protozoan causing diarrhea in human, specifically in children. Hence, we aimed to investigate the prevalence of this protozoan among diarrheic children hospitalized in Gonbad Kavus in 2011.

Material and Methods: Three stool samples were collected from diarrheic children in two hospitals of Gonbad city and a relevant questionnaire was filled out for each child. The stool samples were concentrated by formalin ether method, and the infection was assessed by modified acid-fast staining method.

Results: Of 547 children, 27 (4.9%) were infected with cryptosporidiosis. There was no significant relationship between the amount of infection and gender and habitation area (urban/rural). The infection rate was significantly prevalent in 2-4-year-old children (P=0.013). The most and the least infection rate were observed in spring and winter, respectively (P< 0.0001). There was a significant association between the disease and keeping animal (P= 0.041).

Conclusion: The prevalence of cryptosporidiosis in diarrheic children in Gonbad is almost equal to other regions of the country and keeping animal and spring season may be considered as the risk factors for the disease.

Keywords: Cryptosporidium, Cryptosporidiosis, Diarrhea, Children, Golestan, Iran