Cryptosporidiosis in Immunocompromised Children

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Abstract:

Background: Cryptosporidium parvum is an obligate intracellular parasite of the Coccidia class that infects the microvilli epithelial cells of the digestive and respiratory systems. Objectives: This study aims to detect the prevalence of cryptosporidiosis among immunocompromised children who receive chemotherapy and to compare the three different methods for diagnosis of Cryptosporidium. Methodology: 200 children in Aswan oncology institute were enrolled in this study, clinical assessment as well as stool examination by modified Ziehl-Neelsen stain, ELISA assay and Immunofluorescence tests were done. Results: The study showed that the over-all infection was 43.5% by immunofluorescence method, 40.5% by ELISA and 28% by modified Ziehl -Neelsen stain. Infection rate increases in haematological malignancies (AML 54.8%, HD 46.2%, ALL 41.6%, NON HD 27.3%) than non haematological malignancy (wilms 50%, sarcoma 45.5%, and neuroblastoma 42.9%). Conclusion: Cryptosporidium infection is an important public health problem in Immunocompromised children, raising awareness about cryptosporidiosis has very important effect to decrease prevalence of this parasitic infection.

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