ACUTE DIARRHOEA ASSOCIATED WITH CRYPTOSPORIDIUM SP
IN BELEM, BRAZIL
(PRELIMINARY REPORT)

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ACUTE DIARRHOEA ASSOCIATED WITH CRYPTOSPORIDIUM SP
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SUMMARY
Cryptosporidium sp was detected in faeces from three children suffering from acute diarrhoea. In two cases no other concomitant agents were detected and in a 3rd. this agent was associated with Entamoeba histolytica, Entamoeba coli, Endolimax nana, Chilomastix mesnili and Pentatrichomonas hominis.

KEY WORDS — Cryptosporidium sp — Acute diarrhoea.

Cryptosporidium sp, a coccidian parasite, belongs to family Cryptosporidiidae, suborder Eimeriorina. It was firstly detected by TYZZER 13 in 1907 and has recently been described as potentially important enteropathogen, affecting both children and adults throughout the world 3,6,15. This parasite has also been found infecting a wide variety of animals 2,7,14.

Recent data on Cryptosporidium infection in humans have been obtained from studies carried out in population groups of Costa Rica 9 and Venezuela 11 where it occurs more frequently during the warmer, rainy and humid months of the year (May-August). It may also cause severe disease in patients whose immunity has been affected 12,17,18 and is a common finding among homosexual patients with AIDS (acquired immunodeficiency syndrome) 8,10.

In our study, specimens were obtained from 61 children (1-2 years old) who were followed for 9 months, and who belong to a low socioeconomic area of Belém, Brazil. 150 Faecal samples were obtained, 94 from diarrhoeic patients and 56 from non-diarrhoeic control patients.

The detection of Cryptosporidium was by a modified Ziehl-Neelsen staining 5, as illustrated in Fig. 1A, which allows a presumptive diagnosis. Confirmation was by both Giemsa (Fig. 1B) and Auramine-rhodamine staining methods. The specimens were also processed for Salmonella, Shigella and Escherichia coli (classic serotypes, enteroinvasive and enterotoxigenic strains), and for rotaviruses, enteroviruses and adenoviruses. Faeces were also examined for intestinal parasites.

Cryptosporidium was found in three (3.19%) of the 94 samples. In two cases (specimen numbers 24.168 and 23.997) this was the only pathogen found, while in the 3rd. (number 24.004) it was associated with Entamoeba histolytica, Entamoeba coli, Endolimax nana, Chilomastix mesnili and Pentatrichomonas hominis. All non-diarrhoeic control patients were negative for Cryptosporidium.

Our findings suggest that Cryptosporidium may be a causative agent of diarrhoea among children, since no viruses or enteropathogenic bacteria were detected in any of these cases. We would also like to stress that this is the

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first time that this agent has been detected among patients with diarrheal syndromes in the Amazon region. Additional studies are required in order to elucidate epidemiological aspects of Cryptosporidium infection in our region.

RESUMO

Diarréia aguda associada a Cryptosporidium sp em Belém, Brasil
(Nota prévia)
Amostras de Cryptosporidium sp foram detectadas das fezes de três crianças com diarreia aguda. Em dois casos, nenhum outro agente foi registrado, concomitantemente, e no terceiro caso, esse co-coccídeo estava associado com Entamoeba histolytica, Entamoeba coli, Endolimax nana, Chilomastix mesnili e Pentatrichomonas hominis.

REFERENCES


