

Cryptosporidiosis and travelers

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Introduction

Cryptosporidiosis is a protozoal parasite infection that has been associated with outbreaks and sporadic cases of human and animal illnesses [1, 2]. Many cases were identified among children, but the disease affects all age groups including old people as well. It

seems that after infection some degree of immunity can last for years [3]. Outbreaks of waterborne cryptosporidiosis associated with a public water supply deserved a significant attention in the last years [4]. There is very little data on travel history for cryptosporidiosis.

In this study we tried to find out the part of traveler disease caused by *Cryptosporidium spp.* in the total number of reported cases of cryptosporidiosis.

Patients and Methods

Data have been collected for the period between January 1, 1998 and December 31, 1999 according to regular reporting and surveillance of acute enteric diseases. Stool samples were collected in the region of Ljubljana,

inhabited by 598,000 people. Specimens were found positive for *Cryptosporidium spp.* by the IFA stain test. A standardized questionnaire was used to find out some differences in cryptosporidiosis between two groups: persons

traveling abroad and those without a traveling anamnesis. Processing of statistical data was done using the medical software application EPI INFO 6.

Results

Of 360 cases with positive stool samples for *Cryptosporidium spp.*, 11 had traveled abroad in the two weeks prior to the onset of the illness. Travelers visited 9 different countries.

Travelers' median age was 23 years (minimum 1, maximum 53, median 24, modus 21). The 349 cases without traveling anamnesis had a median age of 28 years (mini-

mum 0, maximum 92, median 18, modus 1).

In our study, case interviews did not identify any immunocompromised patients.

Conclusions

It is obvious that infectious diseases that are highly prevalent in one part of the world can be rare or absent elsewhere. In this study only a small part of the patients infected with *Cryptosporidium spp.* were infected abroad (3% of all cases). Our results contrast with those of Baumgartner et al. from Switzerland [5] where cryptosporidiosis is a disease of low epidemiological significance. In our study,

cryptosporidiosis occurred mostly in children for whom traveling abroad is not frequent. This is significant for the development of immunity to the infection.

In order to prevent cryptosporidiosis we must better understand the ways of propagation of *Cryptosporidium spp.* by molecular characterization of parasites [6] and further epidemiological investigations.

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Table 1

Imported cases of cryptosporidiosis in the region of Ljubljana, 1998-1999.

Country	number of imported cases
Bosnia and Herzegovina	2
Croatia	2
Greece	1
Indonesia	1
Cuba	1
Malaysia	1
Nepal	1
Tunisia	1
Turkey	1
Total	11

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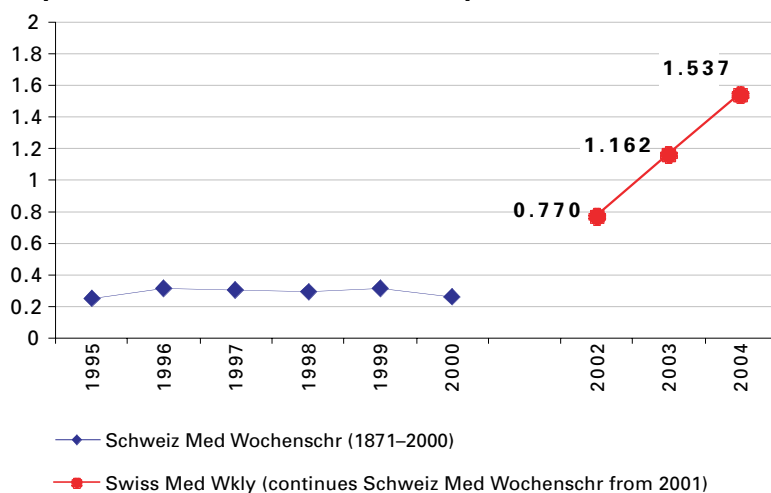
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