

Short Reports

Prevalence of Cryptosporidium in immunocompetent Indian children with recurrent abdominal pain

Cryptosporidium spp. is an important cause of gastroenterological problems in children in developing countries.¹ A number of studies from India have reported *Cryptosporidium* in diarrheal stool samples from children, with positivity rates of up to nearly 20%.² Asymptomatic infection rates of up to 10% have also been reported.³ In addition to causing symptoms associated with acute and chronic diarrhea, childhood cryptosporidiosis has been associated with abdominal pain.⁴ However, there are no reports on prevalence of cryptosporidiosis in children with recurrent abdominal pain.

A retrospective study was carried out at our centre examining children aged 2 to 15 years presenting with recurrent abdominal pain over one year. All children underwent a thorough history and physical examination and at least three stool investigations. The definition of recurrent abdominal pain was taken as that defined by Apley.⁵ Fecal smears were prepared by smearing fecal material on glass slides, mixing with polyvinyl alcohol and drying at room temperature. *Cryptosporidium* oocysts were identified using Kinyoun's modified acid-fast stain.⁶ Forty children presented with recurrent abdominal pain over a period of 12 months. Out of these seven were infected with *Cryptosporidium* spp. Abdominal pain due to *Cryptosporidium* infection was most prevalent in the 6 to 9 year-old age group (27.3%). None of the patients were suffering from any immunodeficiency disorder or were on any immunosuppressants or corticosteroids.

All the children with documented *Cryptosporidium* infection were put on nitazoxanide therapy in age appropriate doses for 3 days and were followed up as outpatients or telephonically. Two children were lost to follow-up. Of the remaining 5 children, 4 (71.4%) reported an improvement in

their symptoms.

Our analysis showed that children infected with *Cryptosporidium* consistently develop abdominal pain unrelated to their age. This could be a hitherto unrecognized presentation of cryptosporidiosis. Our study has a few limitations. Being a tertiary center there is a possibility of selection bias. Secondly, we did not check for eradication of the organism after administering nitazoxanide, so in some of the cases there could be a placebo effect. However, since recurrent abdominal pain is a frequent symptom in pediatric practice, more studies are required to validate our observations.

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