Follow-up of a Case of Cryptosporidiosis in a Toddler from Mexico: Response to the Treatment

Sir,

There are approximately 8 million annual deaths of children under 5 years of age worldwide, and diarrhea is associated with 10.5% of these deaths.[1] *Cryptosporidium* species are major pathogens that cause moderate-to-severe diarrhea in children in resource-poor settings. This study reports the case of a male patient of 17 months of age with a diarrheic episode for 10 days with liquid evacuations (without mucus or blood) 7–10 times per 24 h. The toddler was treated with trimethoprim sulfamethoxazole and probiotics. Despite the treatment, the patient continued to have diarrhea, and three consecutive stool samples were collected to look for the most prevalent intestinal parasites in the region.[2-5]

The stool samples were positive for *Cryptosporidium parvum* (IIaA15G2R1) [Figure 1] and negative for the other parasites. The identification of genotype and subtype was confirmed by sequence analysis of the polymerase chain reaction (PCR) product. The toddler was treated with secnidazole 20 mg/kg and nitazoxanide 7.5 mg/kg every 12 h for 3 days. After 2 weeks, the stool samples were of normal consistency, but PCR was positive to *C. parvum* and the treatment was repeated. Twenty days later, the samples were negative. Follow-up was finished 2 months later, when the last three samples were PCR negative. This is a follow-up report of a case of cryptosporidiosis by molecular diagnosis from the moment of the identification of the parasite *C. parvum* until the stool samples were negative. Therefore, the diagnosis and monitoring of cases until the elimination of the parasite is essential to determine the effectiveness in the management of the infection or reinfections.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent form. Informed consent was obtained from the mother of the patient after the objectives of the study were

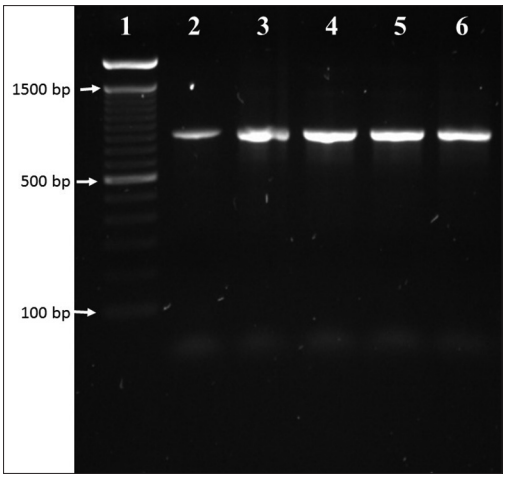

Figure 1: Polymerase chain reaction products of the gp60 gene of *Cryptosporidium* spp. Lane 1, molecular markers (bp); lane 2, *Cryptosporidium parvum* control; lanes 3–5, samples analyzed before treatment; lane 6, samples analyzed after 15 days of treatment

clearly explained. The clinical characteristics of the patients were obtained with prior authorization from the patient's clinical files by the treating physician.

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Conflict of interest

There are no conflicts of interest.

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