

O336

Abstract (oral session)

Distribution of Blastocystis genotypes colonisation among children with gastrointestinal disorders in Saint Petersburg

E. Tarasova*, M. Suvorova, A. Sigidayev, A. Suvorov (St.Petersburg, RU)

Objectives: Blastocystis is one of the most common pediatric intestinal parasites. Nowadays Blastocystis is recognized as a complex of subtypes that have not been fully characterized as independent species. Different gastrointestinal disorders (irritable bowel syndrome, inflammatory bowel disease and chronic diarrhea) are associated with Blastocystis infection. However, at the same time the presence of a Blastocystis does not obligatory lead to the intestinal disease. The aim of the present study was to analyze the Blastocystis subtypes among the isolates from pediatric patients in Saint-Petersburg and identify the correlation between the subtype and gastrointestinal symptoms. **Methods:** 1273 stool samples were collected from healthy children or children with gastrointestinal disorders. 78 isolates were positive for Blastocystis. The isolates were analyzed with specific primers for 1-9 type employing PCR. **Results:** Analysis of the level of Blastocystis colonization showed that subtype 3 was the most common in both symptomatic and asymptomatic groups (73%). Subtype 2 was detected in 24% of all isolates, subtype 1 in 15%, subtype 4 in 2,5 % and subtype 7 in 3,8 %. Subtypes 2 (32%) and 3 (24%) were found in the isolates from asymptomatic the group without gastrointestinal symptoms. In symptomatic groups we mainly detect subtypes 3 (43,4%) and 1 (22,6%) separately or together (24,5%), subtype 4 in 3,7 % and subtype 7 in 5,6 % of isolates. Interestingly, only patients from the group with subtype 7 were not sensitive for metronidazole after treatment. **Conclusion:** The present study suggests that subtype 3 is the most common genotype in pediatric patient in Saint-Petersburg. It is quite possible that subtype 2 is a non-pathogenic genotype of Blastocystis. At the same time subtype 7 might be associated with metronidazole resistance of Blastocystis. These facts clearly demonstrate that there is a need of preliminary identification of the parasite before the treatment.