Detection of different enteric protozoa parasites with combination of immunological and microscopic methods, in Albania

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Enteric protozoa are associated with diarrheal illnesses in humans, particularly in children and represent a significant threat to public health that often was neglected. Several enteric protozoa cause severe morbidity and mortality in both humans and animals worldwide. Therefore, the study aim was to estimate the prevalence of enteric protozoa in children and to compare the efficiency of different procedures in diagnosing. During September 2013-August 2014 we have examined 115 patients for Entamoeba histolytica, Cryptosporidium parvum and Giardia lamblia. Two methods, classic microscopy and ELISA were used for examination of enteric parasites in our study. The average age was 6.66 and the minimum age was 3 months old and maximum 15 years old. Based to the data 53.04% were female and 46.95% male. The prevalence of \textit{E histolytica}, \textit{C. parvum} and \textit{G. lamblia} resulted 4.34%, 2.6% and 12.17% respectively by microscopy. By ELISA method the prevalence resulted 7.82%, 4.34% and 20.87% respectively. Also about 18, 44 and 44 samples respectively are considered as equivocal by ELISA test. This high result of equivocal test to patients maybe were as result of the cross reaction between protozoa parasites. Depended of the methods that we have used the male were the most contaminated sex. In our study ELISA methods resulted to be more sensitive compared to classic microscopic, but other tests like PCR-based tests need to be used for understanding the actual prevalence and epidemiology of these protozoan parasites.

Biography

Erjona Abazaj is currently working as a Biologist/Parasitologist in the Laboratory of Parasitology, Institute of Public Health (IPH), Tirana, Albania. Her research is focused on the analysis of gastrointestinal and blood parasites in 2002. She has completed her Master’s degree in 2005 and completed PhD in 2009. Her research focus centered on the recognition of \textit{Toxoplasma gondii} in the Albania population by using immunological and molecular methods.

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