Introduction

Endoparasitic infections of human gastrointestinal tract are currently one of the most pressing problems of health care systems in both developing and developed countries in the world. According to the World Health Organization, more than 1.2 billion people are infected with Ascaris lumbricoides and more than 795 million are infected with Trichuris trichuria.

Transmission is associated with low personal hygiene.

Prevalence of endoparasitic infections is closely related with poor social-economic status of the population with lower hygiene standard.

Major part of parasitic infections is spread via fecal-oral route (Fig. 1).

Groups of population with higher risk of acquiring endoparasitic infections are children, pregnant women and immunocompromised patients.

Manifestation of the infection depends on the development stage of the parasite and intensity of the infection.

Heavy infection of gastrointestinal tract with parasites leads to retardation and slow growth can occur in children.

Methods

Samples of stool (approximately 10-15g of stool) were collected by parents or hospital personnel from all the child patients included in the study.

Commercial kit was used for separation of parasites' eggs from stool samples (Paraprep L, Mondial, France) (Fig. 2).

1. Each sample contained 6 ml of 10% formalin in mixing chamber to which 0.5g of stool and 2ml of ethyl acetate solution were added.
2. 24 hour incubation in room temperature
3. Centrifugation (15 rpm, 1min).
5. Sediment – transferred to microscope slide.

Specimens were examined by light microscope Leica DM 5000b with magnification of 100× a 400×.

Results

From 150 stool samples examined 12 (8,0%) were positive on presence of intestinal parasites (Fig. 3).

Gender distribution of positive samples:

- 7 boys
- 5 girls

Conclusion

Our study shows low prevalence of parasitic infections in the examined children.

Highest prevalence of endoparasitic infections was detected in 2nd age group (children 3 to 5 years old).

The most commonly detected gastrointestinal parasite was A. lumbricoides followed by T. trichuria.

One of the reasons for low occurrence of parasitic infections can be the constant medical supervision and unlimited access to appropriate therapy of not only the primary affection but also of the associated infections in hospitalized patients.

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