

Optimization of Modern Therapy Giardiasis

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Abstract: The article presents the clinical and epidemiological characteristics of patients with giardiasis and the improved methods of treatment of patients with chronic giardiasis with the use of Metronidazol. The presented indexes of sanitation of the organism from protozoa, which make up 92% in the main group in 3 months after the conducted treatment in comparison with 75% in the control group (2% and 16% positive coproscopy accordingly), point at the high effect of Metronidazol therapy in combination with albendazole.

Keywords: giardiasis, metronidazol, phytopreparation, prevention.

Relevance. Lambliasis belongs to the most widespread parasitic diseases in both children and adults and is found in all countries of the world. According to the World Health Organization (WHO), 10-20% of the world's population is infested with giardia [1]. Lambliosis is a disease present in all countries of the world, in particular, in the United States it affects 7.4% of the population, in Norway - 3.3%, in Russia from 12 to 35%, in Ukraine - 10%. The average incidence varies from 0.5% to 18% [2, 3]. For specific therapy of giardiasis in children several groups of antiparasitic drugs are used: group of nitroimidazoles (metronidazole, tinidazole, ornidazole, secnidazole); nitrofurans derivatives (nifuratel, furazolidone); benzimidazole derivatives (albendazole, mebendazole) [2, 4, 5]. It should be noted that the literature data on the effectiveness of anti-giardiasis drugs vary considerably. Recovery from giardiasis was stated in children who received macmiror, 80.0%, metronidazole - 70% [6,8]. According to other authors, the effectiveness of giardiasis monotherapy in children with the most commonly used antiparasitic drugs is very low. Giardia eradication was achieved by macmiror monotherapy in 21.4% of patients, by metronidazole - in 12.5%, by nemozole - in 33% [7,9]. Despite great success in the creation of highly effective antiparasitic drugs, the treatment of giardiasis remains one of the unresolved and complicated problems.

Objective of the study. To analyze modern methods of giardiasis treatment, to improve and increase the efficiency of etiotropic therapy of giardiasis infection.

Materials and methods. Inclusion criteria: the age from 18 to 45 years old, the giardiasis confirmation by the results of coprological investigation, the absence of allergic reactions to nitroimidazole preparations in the anamnesis. All the patients were examined according to a single scheme, which included a complex of clinical and laboratory tests, interview and examination of the patient. Clinical manifestations of the disease were evaluated before treatment, on the 5th day of therapy and immediately after the end of the course of treatment. Determination of clinical and biochemical blood parameters before the start of treatment and immediately after the end of treatment. The diagnosis was verified on the basis of clinical and anamnestic findings and laboratory data (fecal coproscopy).

Results and discussion. The comparative analysis of the clinical and laboratory parameters in the examined patients with giardiasis before conventional treatment was carried out. The study group included 300 patients, including 197 patients aged 18 to 45 years (1-group), and 103 children aged 5 to 18 years (2-group). Analysis of the clinical and anamnestic facts showed that the leading symptoms in patients with giardiasis were gastrointestinal lesions in 65,9% of the adult cases and in 39,8% of the child cases. In second place were general condition disorders in the form of asthenovegetative syndrome: in 58.4% of adult cases and in 66.0% of child cases. Toxic-allergic syndrome ranked third: in 42.6% of adult cases and in 78.6% of child cases. Observed patients of this group received traditional treatment with antiparasitic drugs. Asthenovegetative and toxic-allergic syndromes

remained practically unchanged in both adults and children after traditional treatment. After completing treatment with the listed drugs we conducted a control parasitological examination to confirm the effectiveness of the treatment. According to the data of coprological examination of the treated patients, there was repeated isolation of giardia cysts: in adult patients - 62.4% and in children - 65%. The treatment efficacy in adult patients was 37.6% and in children 35.0%. This served as the basis for further research and the search for effective therapeutic methods. In this connection, of no small interest is the use of phytopreparations, the advantage of which is their low toxicity and the possibility of long-term use without significant side effects. In order to choose the optimal scheme of treatment and evaluate its clinical efficacy patients with chronic giardiasis were divided into two groups. The basic group consisted of 50 patients with acute and chronic giardiasis who took "Metronidazol" 1-3 tablets 3 times a day, the course of treatment was 15 days. The comparison group consisted of 50 patients treated with the drug "Albendazole", which has antibacterial and antiprotozoal effect in the dose of (400 mg) 1 tablet 2 times a day, the course of treatment was 5 days.

Analyzing clinical symptomatology of the patients studied, we found disorders of general state in the form of asthenovegetative syndrome (76% and 70% of cases); gastrointestinal damage syndrome (64% and 54%); toxic-allergic syndrome (33% and 38%) - in the main and control groups respectively.

After taking 15-day course of preparation "Metronidazol" all patients had improvement of general state and well-being (in the form of decrease of weakness), appetite was improved. In the control group, after taking "Albendazole" during 7 days, the dynamics of symptoms was insignificant. In the group of patients who received "Metronidazol" the manifestations of asthenovegetative syndrome were less expressed than in the control group. The phenomena of weakness and headache in the patients of the main group were twice less than in the control group. Dynamics of changes in the indicators of toxic-allergic syndrome in the main group is more dynamic, complete relief of skin itching was noted.

Of the manifestations of gastrointestinal syndrome in the main group, positive dynamics was noted. Such symptoms as swollen tongue, belching, heartburn, nausea, vomiting, feeling of overflow in the stomach, flatulence and rumbling in the intestines were halved, stools were normalized. In the control group, the dynamics of the above symptoms was insignificant. At the moment of discharging from the hospital during stool examination for protozoa and during probing in two days after discontinuation of the drug, practically all the patients in the main group were sanitized from giardia cysts in comparison with the control group. The effectiveness of treatment in the group of patients treated with "Metronidazol" was 85%, while in the control group it was only 62%. 38% of the control group patients had recurrence of giardia cysts, while the main group had only 15%. The percentage of elimination of Giardia cysts in the main group was 4 times higher than in the control group, which evidences the high effectiveness of the drug "Metronidazol". Since the efficacy of the treatment in the control group didn't exceed 38%, the patients were repeatedly treated. Further, 21 days after treatment the efficacy of the antilyambiasis therapy was evaluated on the basis of the results of repeated examination of the stool for giardia cysts. In the main group, a repeated excretion of giardia cysts was observed in only 2 (4%) and in the control group in 8 (16%). In 3 months after treatment, the efficacy of antilyambiasis therapy was further evaluated according to the results of repeated examination of stool for giardia cysts. Fecal coprological examination was positive in the main group in 8% of cases in the main group and in 16% of cases in the control group, respectively. The presented indicators of sanitation of the organism from protozoa, being 92% in the main group against 84% in the control group, along with indicators of the prospective effect in 3 months after the treatment (positive coproscopy - 2% and 16%, correspondingly) indicate high effect of therapy with "Metronidazol" in combination with albendazole.

Conclusions:

1. The results of the carried out research showed that the standard antihelminthic treatment leads to the positive dynamics of giardia elimination, but not to the full extent, as the reassortment of the giardia cysts in adults is marked in 62%, and in children - in 65%, in connection with this the treatment effectiveness in adults patients did not exceed 37%, and in children - 35%.

2. The presented parameters of sanitation of the organism from protozoa, which in 3 months after the treatment were 92% in the main group versus 84% in the control group (positive coproscopy was 2% and 16% respectively), indicate high effect of "Metronidazol" therapy in combination with albendazole.

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