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AGE-RELATED FEATURES OF CLINICAL MANIFESTATIONS OF GIARDIASIS

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ABSTRACT

The work is based on the assessment of age-related features of clinical manifestations of giardiasis. We observed 124 patients aged 3 to 18 years, including 104 children with giardiasis and 20 children of the same age without giardiasis, who made up the comparison group.

The clinical picture of giardiasis in children is characterized by a combination of pain, dyspeptic and astheno-neurotic syndromes. With age, there is a decrease in the frequency of pain in the navel area and an increase in pain in the epigastric region, left and right hypochondria, as well as a tendency to increase the frequency and intensity of pain, without a clear connection with food intake. Dyspeptic disorders such as heartburn, belching, nausea are more common in older children, while cases of vomiting become less frequent with age. Diarrhea is one of the leading symptoms regardless of age. A characteristic clinical symptom of giardiasis is pigmentation of the navel and the white line of the abdomen, the symptom has 100% sensitivity and 78% specificity.

KEYWORDS

Giardiasis, clinic, dyspeptic disorder, helicobacter infection.

INTRODUCTION

Uzbekistan is one of the countries with a hot climate for which helminthic and protozoal diseases are

endemic [1,2]. To date, the number of infected is about 200 thousand people, 70% are children under 14 years



of age. The most widespread on the territory of Uzbekistan from protozoal invasion belongs to giardiasis, and from helminthic invasion to hymenolepidosis [3,4]. The problem of giardiasis is one of the most urgent in childhood. According to WHO (2002), its prevalence in the child population is 355 cases per 100,000 children. In different regions, this figure may fluctuate up or down depending on social and living conditions, housing conditions [5,6,7,8,9, 10], the possibility of diagnosing giardiasis, as well as the alertness of doctors about this parasitic invasion.

The relevance of giardiasis in children is largely due to the fact that its clinical manifestations are often masked by various variants of gastroenterological pathology [11,12,13,14,15,16], including functional disorders of the gastrointestinal tract (gastrointestinal tract), syndromes of excessive growth of intestinal microflora in the small intestine, malabsorption, multivitamin deficiency, as well as the development of allergic diseases - recurrent urticaria, atopic dermatitis, gastrointestinal form of food allergy, which without adequate therapy acquire a recurrent course [17,18,19,20,21,22]. At the same time, the lack of verification of the diagnosis does not allow for adequate therapy.

The purpose of the work. To study age-related features of clinical manifestations of giardiasis.

MATERIALS AND METHODS

The study was conducted on the basis of the Bukhara Regional Infectious Diseases Hospital. We observed 124 patients aged 3 to 18 years, including 104 children with giardiasis and 20 children of the same age without giardiasis, who made up the comparison group. Children with giardiasis, depending on the combination with HP infection, were divided into 2 groups: group 1 - 42 people with giardiasis invasion without HP infection.

Group 2 - 62 people with giardiasis invasion in combination with HP infection. 20 people in the comparison group, without giardiasis, but with HP-associated gastroduodenal pathology, made up group 3. The groups were formed in such a way in order to clarify the clinical, endoscopic and morphological differences of gastroduodenal pathology caused by HP infection and giardiasis, as well as especially combined invasion.

Clinical and anamnestic examination was carried out according to a questionnaire developed by us, which took into account complaints, anamnesis of the disease, and objective examination data. All children underwent the following studies: clinical blood and urine tests, coprogram, stool culture for intestinal group, stool culture for dysbiosis, stool analysis for worm eggs and giardia cysts.

THE RESULTS OF THE STUDY AND THEIR DISCUSSION

The analysis of clinical and anamnestic features in children of the studied groups showed that the clinical symptoms of giardiasis in children are characterized by a combination of abdominal pain and dyspeptic symptoms. Most often, the pain is localized in the navel area (53.1%) and can be combined with pain in the right (15.6%) and left (15.6%) hypochondria. Pain is infrequent, moderate in intensity (78.1%), sometimes mild (6.25%), more often unrelated to eating (62.5%), or occurring immediately after eating (21.8%). Unlike giardiasis, for children with HP-associated diseases, recurrent epigastric pain is more characteristic (65%), usually daily (50%), more intense (25%), which are associated with food intake (100%) and are more often noted an hour after eating (80%) or immediately after eating (20%). Patients with mixed giardiasis and HP infection are characterized by a combination of the features of the pain syndrome described above. The most characteristic dyspeptic disorders in children with

giardiasis were diarrhea, it was observed in 71.5% of children, 69% had flatulence, 24% had periodic vomiting. With HP infection, symptoms caused by dysmotor disorders of the upper gastrointestinal tract were more common: nausea (65%), belching (40%) and heartburn (25%), without violation of the frequency and nature of stool. With combined invasion, any of the above symptoms were noted in different combinations. With age, with giardiasis, there is a decrease in the frequency of pain in the navel area, which is probably due to the fact that older children can more accurately localize pain, and there is also an increase in pain in the epigastric region, left and right hypochondria. In addition, with age, there is a tendency to increase the frequency and intensity of pain, without a clear connection with food intake. pancreatic type - it was found only in patients with giardiasis: in 2.3% in group 1 and in 8.1% of patients with combined invasion.

Data analysis showed that allergic reactions to food antigens occur in children with giardiasis in 82% overall, which is significantly more common than in HS ($p < 0.05$). Allergic reactions to citrus fruits, milk, fish, and eggs were more common. Allergies to fish and red fruits were significantly more common ($p < 0.05$) than in the comparison group.

Allergic reactions to medications in children with giardiasis tended to increase with age. Eosinophilia occurred in a third of patients with giardiasis (17%), it was somewhat more common with a combination of giardiasis and helicobacter infections (22.5%) and was not observed in any patient from the comparison group ($p < 0.05$). Eosinophilia was more common in middle age groups: in group 2, 5 (24%) patients, in group 3, 10 (29%). In adolescents aged 15-18 years, eosinophilia occurred in 4 (14%) cases, in children aged 3-6 years - in 2 (10%).

During an objective examination of patients with giardiasis, we noticed a high frequency of pigmentation symptoms around the navel and along the white line of the abdomen. This symptom had 100% specificity and 78% sensitivity.

The astheno-neurotic syndrome, manifestations of vegetative-visceral dysfunctions and allergic manifestations found in patients with giardiasis in all cases were combined with pain and dyspeptic abdominal syndromes, which did not allow us to identify individual clinical forms of giardiasis. The high frequency of these extra-digestive syndromes indicates an undoubted connection of their development with this parasitic invasion and complements its clinical picture.

Conclusion. The clinical picture of giardiasis in children is characterized by a combination of pain, dyspeptic and astheno-neurotic syndromes. With age, there is a decrease in the frequency of pain in the navel area and an increase in pain in the epigastric region, left and right hypochondria, as well as a tendency to increase the frequency and intensity of pain, without a clear connection with food intake. Dyspeptic disorders such as heartburn, belching, nausea are more common in older children, while cases of vomiting become less frequent with age. Diarrhea is one of the leading symptoms regardless of age. A characteristic clinical symptom of giardiasis is pigmentation of the navel and the white line of the abdomen, the symptom has 100% sensitivity and 78% specificity.

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