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Features of Psychoemotional Status in Children Having Different Irritable Bowel Syndromes

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The aim of the study was to investigate the characteristics of mental and emotional status of children with different irritable bowel syndromes (IBS). The study covered mental and emotional status in 67 children aged 12 to 17 years. The majority of patients had dysthymia, high anxiety, in combination with different accentuation nature. A conclusion was made about the necessity of psychological support for children with IBS, as well as of psychiatric examination for the purpose of timely appropriate medical treatment appointment.

Keywords: *irritable bowel syndrome, psychoemotional status.*

Introduction

Irritable bowel syndrome (IBS) combines functional bowel disorders, in which the discomfort, abdominal pain, change in stool frequency are combined with other signs of bowel disorders [1].

IBS is common in both adults and children. In developed countries, the prevalence of IBS varies from 14-22 up to 30-48% in the population, according to different studies [2]. According to Russian researchers, in one of the West Siberian megapolises among from 14 to 24% of surveyed teenagers aged 14-17 years had the symptoms of IBS [3].

This pathology has been studied for several reasons mainly in adult patients. The relevance of studying irritable bowel syndrome in children is determined not only by its prevalence, but also by its tendency to chronicity, as well as by the influence of pain on the child's emotional state, which will affect the school adaptation process. In addition, in some cases, the origins of IBS in adult patients lie in their childhood [3-7].

The concept of IBS as a biopsychosocial functional pathology suggests that the development of symptoms of this disease is an important interaction between autonomic

dysfunction, psychological factors of discomfort with the motor and secretory disturbances of various parts of the intestine [3-5, 7-9].

This research aims to study the peculiarities of emotional status of children having different variants of IBS.

Patients and research methods

There were examined 67 children (38 girls and 29 boys) between aged 12 - 17 years having various IBS versions, who were in the Department of gastroenterology of CSCH № 9. Of G.N. Speranskii.

Patients underwent a full range of clinical, laboratory and instrumental examinations. Basing on the results of studies in accordance with Rome criteria III [10] they were diagnosed with IBS.

All the children were divided into 3 clinical groups: I - 37 children with predominating constipation (20 girls and 17 boys); II - five children with diarrhea predominance (3 girls and 2 boys); III - 25 children with mixed disabilities (11 girls and 14 boys). To assess the psychosocial status of the child there were used:
- A 16-factor checklist by R. Cattell (multivariate method for estimating the properties of normal personality, for describing human personality structure and identifying problems) [11];

- Pathocharacteristical questionnaire by A.E. Licko, which is designed to determine the type of character with psychopathy, psychopathic states, as well as accentuation of character, which are all considered to be extremes of the norm [12];

- The scale of social and situational anxiety by Spielberger and Kondash (test to determine the level of anxiety) [13].

Research results and discussion

Studies have shown that the majority (59.7%) of children with IBS had various violations of the psychosocial status. Dysthymia is among the most common disorders - in 20 patients (29.8%). Dysthymia - a protracted subdepression with symptoms that are insufficient for diagnosing "depression", but which last chronically. At the same time in 15 children (75%) with dysthymia a trend towards further development was defined.

As for the characteristics of children in clinical groups, it should be noted that children having IBS with constipation, did not show any tendency to low mood. IBS diarrhea was often combined with the development of dysthymia in children. Thus, the mixed version of IBS dysthymia was found in 16 (64%) of children, while diarrhea was found in 4 children (80%) (Table).

In assessing the psychological state of children with different IBS forms according to the Spielberger test there were recorded different levels of anxiety. Increased anxiety was marked in a group of children having IBS with constipation - in 6 (16.2%) children; in those having

diarrhea – it could be marked more often (in 4 out of 5); and among patients with IBS mixed type – it could be seen only in 10 children (40%). The low level of anxiety was more typical for children having IBS with constipation - in 31 (83.8%) children (see table)..

These tests indicate that higher levels of anxiety and dysthymia are more often presented in children having diarrhea in the clinical picture of IBS.

During the survey on psychological status using pathocharacteristical questionnaire of A.E. Licko, 57 (85%) of surveyed children identified the different types of character accentuations. Labile asthenoneurotic and cycloidal types were diagnosed in 27 (73%) patients in group I, in 22 (88%) children of group II and in all children of group III (see table). Accentuation of the character is likely for all clinical variants of IBS. Such children easy enter conflicts and have increased sensitivity to psychotraumatic influences.

Thus, during the study of the psychosocial status of children having different IBS variants there was revealed a high frequency of dysthymia and a high level of anxiety, along with a variety of character accentuation, which may affect the quality of children life, reducing school adaptation and contribute to the progression of IBS symptoms. Depending on the form of IBS in children, there can be determined various violations of psychosocial status, which are most pronounced in children having diarrhea.

Such psychosomatic changes were also found in adult patients having gastroenterological disorders (IBS patients, patients having biliary tract dysfunction). In this regard, psychotropic drugs were prescribed to patients and positive clinical benefit was obtained [14, 15].

Increased anxiety and dysthymia was previously identified in patients having duodenal ulcer and gastroduodenitis. Herbal medicine was included into the complex therapy of these patients, which has anxiolytic and antidepressant action [4, 7, 16].

This study shows that consultations of child clinical psychologist should be included into the inspection plan for sick children having IBS.

The achieving of clinical remission in children having IBS according to the traditional advice is not always accompanied by an adequate normalization of the psychological status. This shows the need for formation of differentiated, learner-oriented programs of therapy, when the choice of medication is determined noting psychofunctional disorders in children.

Conclusion

Patients with irritable bowel syndrome had a variety of psychosomatic changes. Increased anxiety was most often observed in children having IBS diarrhea. Given the high level of psychopathological disorders in patients with IBS, it becomes important to implement available psychometric techniques and to organize psychological counseling for the correct psychosomatic

diagnosis into gastroenterological practice. If various disorders in the psychosocial status are detected, it is appropriate to include correcting drugs into the complex treatment of children.

Table. Psychoemotional status of patients having different irritable bowel syndrome variants (IBS)

Characteristics of children in clinical groups	I group (IBS with constipation) n=37	II group (combined IBS) n=25	III group (IBS with diarrhea) n=5	p
Dysthymia, %	-	64	80	1-2 p<0,05
High anxiety rate, %	16*	40	80	1-2 p<0,05
Low anxiety rate, %	84*	60	20	1-2 p<0,05
Character accentuation, %	73	88	100	-

Note: * - while comparing these groups, p <0,05

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