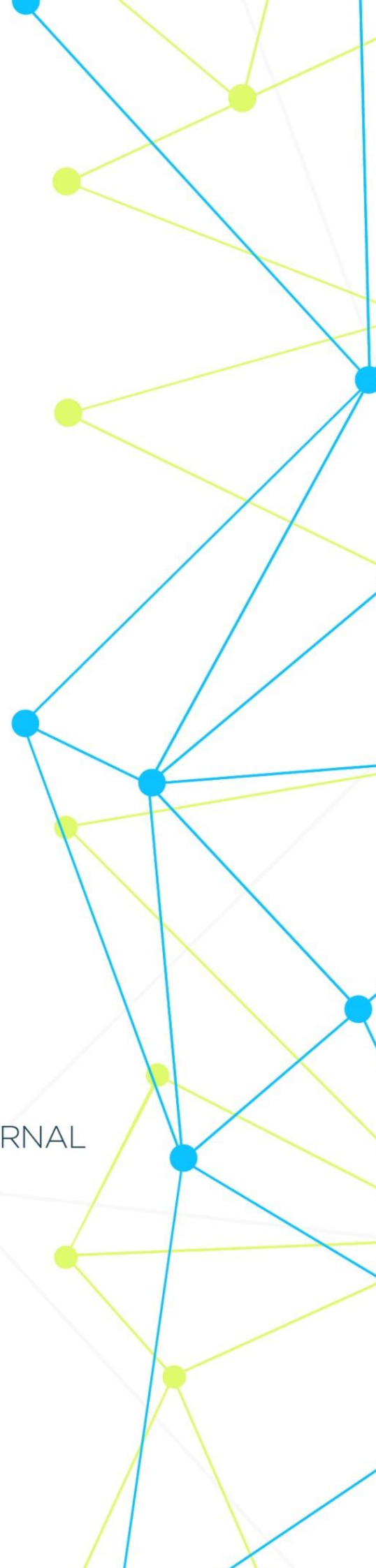


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CLINICAL MANIFESTATION OF IRRITABLE BOWEL SYNDROME

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Abstract. Irritable bowel syndrome (IBS) is a biopsychosocial disease consisting of a set of functional disorders not explained by organic changes in the intestine. Patients with IBS were divided into two groups: with non-refractory (IBSn - 35 people) and refractory (IBSr - 47 people) the course of the IBS. Of these, taking into account the leading clinical syndrome, patients with IBSn-d (diarrhea) - 21 people were identified (25.6%), IBSn-c – (constipation) 14 people (17%), IBSr-d - 28 people (34.2%), IBSr-c - 19 people (23.2%). More abdominal pain syndrome was noted in patients with a clinical form of IBS with a predominance of diarrhea. The ordinal assessment of the severity of IBS symptoms allows to objectify the severity of clinical manifestation of intestinal dysfunction in patients, identify the clinical features of the course of this pathology.

Key words: irritable bowel syndrome, clinical symptoms, Bristol scale

Introduction. Functional bowel diseases (FBD) make up the majority of functional gastrointestinal (GI) pathology, characterized by a variable combination of chronic or recurrent symptoms related to different parts of the GI tract that cannot be explained by morphological or biochemical abnormalities. These disorders are diagnosed by excluding a number of organic gastrointestinal diseases that have similar manifestations, after a thorough examination of the patient. In May 2016, the world gastroenterological community at the American Gastroenterology Week got acquainted with the Rome IV criteria, the main provisions of the consensus have already been published [1,2,3,4].

Table 1. Rome criteria IV. Section C. "Functional bowel disorders"

C1. Irritable bowel syndrome

C2. Functional constipation
C3. Functional diarrhea
C4. Functional bloating
C5. Nonspecific functional intestinal disorder
C6. Opioid-induced constipation

Irritable bowel syndrome (IBS) is a biopsychosocial disease that is a complex of functional disorders that cannot be explained by the organic changes in the intestine in the patient [5,6,7,8].

According to the metaanalysis published in 2012, in which, according to quite strict selection criteria, 80 clinical studies with a total number of patients 260,960, the prevalence of IBS in the world is 11.2% [9]. Only 12-15% of patients seek medical care. In Southeast Asia, its frequency is 7%, in Europe 20%, 21% in South America. According to literature, the number of patients with functional disorders of the gastrointestinal tract, including the IBS, in a specialized gastroenterological hospital reaches 41-45% [10,11,12]. The Massage of the IBS among women remains higher than among men. Young people are more susceptible to the development of the disease, rather than 50 years old. Any case of the manifestation of the clinical picture of the IBS in patients of an older age category should alarm in relation to the elimination of organic pathology.

The purpose of the study. A study of the clinical symptoms of patients with different forms of IBS.

Material and research methods. The article summarizes the data of surveys 82 patients with the IBS on the examination and treatment in the Gastroenterology bombing department from 2017 to 2019. The average age of patients was $33,2 \pm 0.8$ years.

Patients with IBS were divided into two groups: with non-refractory (IBSn - 35 people) and refractory (IBSr - 47 people) the course of the IBS. Of these, taking into account the leading clinical syndrome, patients with IBSn-d (diarrhea) - 21 people

were identified (25.6%), IBSn-c – (constipation) 14 people (17%), IBSr-d - 28 people (34.2%), IBSr-c - 19 people (23.2%). The control group included 20 healthy volunteers (6 males and 14 females) who underwent prophylactic screening as part of the examination of gastrointestinal tract pathology at BRMMC (Bukhara Regional Multidisciplinary Medical Center). The mean age of the control group was $27,8 \pm 4,1$ years.

The diagnosis of IBS was established taking into account the Roman criteria - IV (2016), recommendations of the bomb. When determining the clinical version of the IBS used the Bristol Cala's forms [Blake M.R., Raker J.M., Whelan K., 2016].

Patients were examined according to standards: General blood test, biochemical blood test with assessment of liver and kidney function, general urine analysis, electrocardiogram, coprogram, test for hidden blood, ultrasound examination of abdominal organs (VIVID S-60,2014, Norway), esophagogastroduodenoscopy Fuginon. Fugi Film EPX-2500, 2014, Japan; Fugi Film-EG-530PF, 2014, Japan), Fibrocolonoscopy (Fugi Film-EG-530FL, 2014, Japan), Contrast X-ray. In 82 patients with CRC, microelements were performed (mass-spectrometry of Usuli, Perkinelmer Inc., Shelton, CT 06484, USA) on her hair. In 42 patients with IBS, bacteriological examination of feces on dysbacteriosis.

Results and discussion. The non-refractory IBS was determined taking into account the anamnesis data. In case of non-refractory IBS, the total length of symptoms over the past year to the present appeal to the doctor was an average of 11.14 ± 0.29 weeks, a positive effect was observed from the therapy appointed in accordance with the clinical recommendations of the bomb. The overall duration of the disease at a non-refractory IBS was 4.3 ± 0.39 years. With refractory IBS, the total duration of symptoms over the past year to the present appeal to the doctor was an average of 29.81 ± 0.27 weeks, there was a low effectiveness of the therapy appointed in accordance with the clinical recommendations of BRMMC, with a confirmed diagnosis of IBS and sufficient adherence to treatment. The total duration of the disease in the refractory IBS was 4.7 ± 0.27 years.

Data on the age of debut of the IBS are presented in table. 2.

Table 2. The debut of the disease is the debut of the disease in various types of IBS

Index	Sex	IBSn-d (n =21)	IBSn-c (n=14)	IBSr-d (n = 28)	IBSr-c (n=19)
1	2	3	4	5	6
Medium debut age M±m	male	21,2 ± 0,4	26,2 ± 0,6	19,3 ± 0.3*	24,0 ± 0,2
	female	22,0 ± 0,4	28,6 ± 0,5*	24, ± 0.3	20,1 ± 0,3*
	Regardless of the sex	21,9 ± 0,3	27,6 ± 0,5*	21,6 ± 0.5	21,9 ± 0,5

Notes: IBSn-d - non-refractory IBS with diarrhea; IBSn-c - non-refractory IBS with constipation; IBSr-d - refractory IBS with diarrhea; IBSr-c - refractory IBS with constipation; * Differences with an average of the middle-aged debut in the entire sample of patients with IBS (p <0.05)

The age of the debut with an non-refractory version of the IBS $24,14 \pm 0.54$ years: with IBSn-d - 21.9 ± 0.3 years, with IBSn-c - 27.6 ± 0.5 . Later, the very beginning of the disease was noted in women with IBSn-c (28.6 ± 0.5) in comparison with the overall sample of patients with IBS (p <0.05).

The age of debut of the disease in patients with a refractory variant of the flow of the IBS was 21.6 ± 0 , years, which is significantly lower (p <0.05) than with the irrefractive course of the disease. In men earlier, the IBSr-d (19.3 ± 0.3) was debuted, in women – IBSr-c (20.1 ± 0.3).

To determine the clinical severity of the IBS flow, we accepted a ballroom system of assessment of symptoms: the lack of a sign was evaluated as 0 points, from weak severity to moderate manifestations - 1 point, expressed manifestations - 2 points. Summing the number of points for each patient is carried out in eight signs (the presence of abdominal pain, diarrhea, constipation, flatulence, feelings of incomplete intestinal emptying, false urges, secretion of mucus, long-term outline

during defecation). Patients who scored 11-16 points were attributed to a group with severe / pronounced manifestations that scored 6-10 points - in a group with moderate / mid-severity, and received 1-5 points - to a group with light manifestations (table 3).

Table 3. Palk scale to determine the severity of the flow of the IBS			
Basic symptom	0 балла	1 балла	2 балла
Abdominal pain	"Not very serious", rarely	"Not very serious", rarely	very strong, "terrible"
Diarrhea	less than 3 times a day	less than 3 times a day	over 5 times a day
Constipation	1 time less than 2 days	1 time less than 2 days	1 time in 5-7 days
Metiorism	+	++	+++
Feelings of incomplete emptying of the intestine	+	++	+++
False urges	seldom	seldom	always
Selection of mucus	seldom	seldom	always
Long strain during defecation	seldom	seldom	always

The distribution of patients depending on the severity of the clinical manifestations of the IBS, obtained as a result of the use of a ball assessment of the severity of symptoms as follows (table 4).

Table 4. Clinical severity of flow and signs of illness during the period of exacerbation in various clinical versions of the IBS
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Clinical symptoms	Вариант течения СРК			
	IBSn-d (n=21) Abs.num. (%)	IBSn-c (n=14) Abs.num. (%)	IBSr-d (n = 28) Abs.num. (%)	IBSr-c (n=19) Abs.num. (%)
Abdominal pain	21 (100)	14 (100)	28 (100)	19 (100)
Diarrhea	21 (100)	0 (0)	28 (100)	0 (0)
Constipation	0 (0)	14 (100)	0 (0)	19 (100)
Flatulence	15 (71,4)	9 (64,2)	11 (39,3)	15 (78,9)
Feelings of incomplete emptying of the intestine	8 (38,2)	11 (78,5)	13 (46,4)	16 (84,2)
False urges	8 (38,2)	2 (14,2)	12 (42,8)	9 (47,4)
Selection of mucus	9 (42,8)	3 (21,4)	17 (60,7)	10 (52,6)
Long strain during defecation	9 (42,8)	7 (50)	9 (32,1)	13 (68,4)
Frequency chaul				
1-4 times a day	12 (57,1%±11,1)*	0 (0)	6 (21,4%±7,9)* #	0 (0)
5 or more than a day	9 (42,9%±11,1)*	0 (0)	22 (78,6%±7,9)* #	0 (0)
1 time in 3-4 days	0 (0)	8 (57,1%±13,7)	0 (0)	6 (31,6%±11,0)
1 time in 5-7 days	0 (0)	6 (42,9%±13,7)	0 (0)	13 (68,4%±11,0) #
Clinical severity of the flow of the IBS				
Easy	10 (47,6)	9 (64,3)	6 (21,4)	4 (21,1)
Average	8 (38,2)	5 (35,7)	9 (32,2)	6 (31,6)
Heavy	3 (14,2)	0 (0)	13 (46,4)	9 (47,3)

Notes: IBSn-d - non-refractory IBS with diarrhea; IBSn-c - non-refractory IBS with constipation; IBSr-d - refractory IBS with diarrhea; IBSr-c - refractory IBS with constipation; * Differences with indicators of a group of non-refractory patients (p <0.05); *# Differences with indicators of a group of refractory patients (p <0.05)

The "intestinal" symptomatics in the refractory current of the IBS was more pronounced than with a non-refractory: at the IBSr-d, the chair was rapid up to 5 or more than a day ($p = 0.0011$), in the morning hours, with an admixture of mucus, tensies were more often marked ($p = 0.0341$) and a sense of incomplete emptying of the intestine after defecation ($p = 0.0314$).

Most patients with IBSr-c presented complaints to constipation up to 5-7 days ($p = 0.0000$), admixture of mucus in feces ($p = 0.0087$). Tenses ($p = 0.0007$) and a sense of incomplete emptying of the intestine ($p = 0.0263$) were noted more often than with the non-refractory course of the IBSn-c.

IBS with constipation prevailed the types of chaul 1st (IBSr-c) and 2nd (IBSn-z) on a Bristol scale. For the IBS with diarrhea, the types of chaul 5th (IBSn-d), 6th (IBSr-d) were characterized. The type of chaul 7th was noted in 8 (28.6%) patients with IBSr-d. The normal forms of chaul (3rd and 4th in a Bristol scale) with a change in the multiplicity of defecation and a sense of incomplete emptying of the intestine in 10 (24.4%) patients with a non-refractory version of the IBS and 8 (7.5%) of patients with refractory variant of the disease (table 5).

стула	Option of the flow of IBS			
	IBSn-d	IBSn-c	IBSr-d	IBSr-c
	(n =21) Abs.num. (%)	(n=14) Abs.num. (%)	(n = 28) Abs.num. (%)	(n=19) Abs.num. (%)
1	0 (0)	2 (14,2)	0 (0)	13 (68,4) *#
2	0 (0)	8 (57,1)	0 (0)	4 (21,1) *#
3	2 (9,5)	2 (14,2)	0 (0)	2 (10,5)
4	3 (14,2)	2 (14,2)	3 (10,7) #	0 (0)
5	6 (28,5)	0 (0)	6 (21,4) *#	0 (0)
6	10 (47,6)	0 (0)	11 (39,3) #	0 (0)
7	0 (0)	0 (0)	8 (28,6) *#	0 (0)

Notes: IBSn-d - non-refractory IBS with diarrhea; IBSn-c - non-refractory IBS with constipation; IBSr-d - refractory IBS with diarrhea; IBSr-c - refractory IBS with constipation; * Differences with

indicators of a group of non-refractory patients ($p < 0.05$); *# Differences with indicators of a group of refractory patients ($p < 0.05$)

When estimating the intensity of abdominal pain on a visual analog scale (VAS), a moderate ($p = 0.0082$) and an intense ($p = 0.0001$) abdominal pain syndrome (table 6) was more often recorded during the refractory flow.

Table 6. The intensity of abdominal pain (VAS)

Pain intensity	IBSn-d (n = 21) Abs.num. (%)	IBSn-c (n = 14) Abs.num. (%)	IBSr-d (n = 28) Abs.num. (%)	IBSr-c (n = 19) Abs.num. (%)
Weak	12 (57,1%±11,1)	8 (67,1%±13,0)	3 (10,7%±5,9)*	2 (10,5%±7,2)*
Average	9 (42,9%±11,1)	6 (42,8%±13,7)	14(50%±9,6)*	9 (47,5%±11,8)* #
Strong	0 (0)	0 (0)	11(19,3%±7,6)* #	8 (42,2%±11,7)*

Notes: IBSn-d - non-refractory IBS with diarrhea; IBSn-c - non-refractory IBS with constipation; IBSr-d - refractory IBS with diarrhea; IBSr-c - refractory IBS with constipation; * Differences with indicators of a group of non-refractory patients ($p < 0.05$); *# Differences with indicators of a group of refractory patients ($p < 0.05$)

The index of abdominal pain according to your refractory IBS was estimated as moderate pain syndrome and was significantly higher than with an non-refractive IBS (3.6 ± 0.2 points, $p = 0.0000$). The intensity of abdominal pain at the IBSr-d (5.7 ± 0.3) was lower than when IBSr-c (6.0 ± 0.4 , $p = 0.0000$).

Conclusion

1. More abdominal pain syndrome was noted in patients with a clinical form of IBS with a predominance of diarrhea.
2. The ordinal assessment of the severity of IBS symptoms allows to objectify the severity of clinical manifestation of intestinal dysfunction in patients, identify the clinical features of the course of this pathology.

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