

THE SIGNIFICANCE OF IMMUNE INFLAMMATION MARKERS IN THE DIAGNOSTIC OF IRRITABLE BOWEL SYNDROME**Makhmudova LI, Abdullayev IA***Bukhara State Medical Institute, Bukhara, Uzbekistan*

Intestinal impaction syndrome (IBS) is common among functional diseases of the gastrointestinal system and includes various theories in terms of causes and pathogenesis. Among them, the following are relevant today: socio-economic status, genetic predisposition, the likelihood of the disease in children of parents with IBS, psychological aspects, hypersensitivity of internal organs, disorders of the gastrointestinal tract, neuroendocrine system changes (brain-intestinal axis), low-grade inflammation, the concept of IBS after an infectious disease, microflora imbalance and finally, nutritional factors [1-8].

The purpose of the study consists in evaluating the clinical and laboratory severity levels of the disease in the types of irritable bowel syndrome with the predominance of diarrhea and constipation.

Material and methods. The study was conducted in the polyclinic and gastroenterology department of the Bukhara regional multidisciplinary medical center, and 98 patients who were examined with IBS in outpatient conditions were selected. The diagnosis of IBS was made based on IV Rome criteria (2016). The average age of patients is 34.6 ± 0.9 years.

Patients with IBS were divided into two groups: IBS with a predominant diarrhea (IBS-D – 47 patients) and constipation-predominant type (IBS-C – 51 patients).

All patients underwent general blood, general fecal analysis, fecal occult blood test, blood biochemical analysis, intestinal microbiota analysis, cytokine analysis - IL-1 β , IL-4, IL-6, IL-10, α -TNF (Vektor-Best reagents), fecal calprotectin (De medi tec reagents) and cortisol analysis in blood, from instrumental examinations - esophagofibromastroduodenoscopy (FUGINON. FUGI FILM EPX-2500, 2014, Japan; FUGI FILM-EG-530PF, 2014, Japan), colonoscopy (FUGI FILM-EG -530FL, 2014, Japan), ultrasound examination of internal organs (Vivid S-60, 2014, Norway) was performed.

Research results. The faecal calprotectin index prevailed in the diarrhea-predominant type of IBS compared to the constipation-predominant type (77.6 ± 2.15 and 44.9 ± 2.54 , respectively). These indicators are not typical for inflammatory diseases of the intestine and correspond to the data in the literature.

A comparative analysis of inflammatory and anti-inflammatory cytokines in patients with IBS revealed increased levels of pro-inflammatory cytokines - IL-1 β , IL-6, α -TNF and anti-inflammatory cytokines - IL-4 and a decrease in IL-10 was found. Non-significant deviations were found when comparing the types of diarrhea and constipation predominance. The amount of pro-inflammatory cytokines differed between the groups. A significant decrease in the level of IL-10 was found in the constipation-predominant type of IBS ($p < 0.05$), and this indicator also showed the same result in the diarrhea-predominant type of IBS ($p < 0.05$).

Summary. In patients with irritable bowel syndrome, the level of fecal calprotectin was higher than in the control group. In addition, the increase in the amount of pro-inflammatory cytokines and the decrease in the amount of anti-inflammatory cytokines indicate the role of immune-inflammatory mechanisms in the development of the disease.

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