IJIMM, Volume 2, Issue 6 2024
ISSN: 2995-5319
http://medicaljournals.eu/index.php/IJIMM

INTERNATIONAL JOURNAL OF
INTEGRATIVE AND
MODERN MEDICINE

MODERN METHODS OF TREATMENT OF NON-SPECIFIC ULCERATIVE COLITIS

Eshniyazova G. Sh
Bukhara State Medical Institute, Bukhara, Uzbekistan

Resume The treatment of NSUC should be selected optimally for each patient. It depends on the severity, prevalence, duration and complications of the disease. Treatment procedures are aimed at improving the patient's quality of life, achieving clinical remission and preventing complications. Group 1 drugs inhibit the production of prostaglandins, reduce the activity of neutrophils and the synthesis of IL-1, IL-6. Group 2 drugs accumulate in the affected area, stop the formation of arachidonic acid, block the synthesis of prostaglandins and leukotrienes, and suppress the chemotaxis of immune system cells. Group 3 drugs are an adjunct in the treatment of NSUC and are mainly recommended for hormone-dependent patients. Drugs of the 4th group are modern biological gene engineering drugs, which are more specific and highly effective compared to the drugs of the previous group.

Keywords: ulcerative colitis, infliximab, mesalazine

The etiology of ulcerative colitis is a group of diseases that have not been fully studied to date. The course of the disease often has a chronic relapsing character, alternating exacerbations and remissions. Remission in the disease can be both clinical and endoscopic and histological. But complete remission of the disease was not observed. According to the data in the literature, it can be seen that 36-60% of patients who passed without clinical symptoms were found to have histological signs of inflammation, and 90% of those in endoscopic remission [1]. Taking into account that it is difficult to achieve histological remission in a short period of time in ulcerative colitis, doctors set themselves the task of achieving clinical remission during treatment. Clinical remission in patients is determined by the absence of blood in the stool, false urge-tenism and the act of defecation no more than 3 times in 1 day [2]. The treatment of NSUC should be selected optimally for each patient. It depends on the severity, prevalence, duration and complications of the disease. Treatment procedures are aimed at improving the patient's quality of life, achieving clinical remission and preventing complications. Treatment is carried out on a complex basis:

1. No medication
2. Medication
3. Improvement of psycho-emotional condition

Non-drug treatment is based on diet. Patients are advised to eat little and often. It corresponds to the 4th diet table according to Pevzner and is based on reducing the mechanical and chemical effects of the digestive system and slowing down the movement of food products. Excessive physical exertion and stress can also activate the sympathetic nervous system and adversely affect the digestive system. Therefore, in the treatment, great importance is attached to the patient's diet and mental state [3].

Medication includes 4 groups of drugs:

1. Products of 1.5-aminosalicylic acid
2. Glucocorticosteroids
3. Immunodepressants
4. BGED (biological gene engineering drugs)

Group 1 drugs inhibit the production of prostaglandins, reduce the activity of neutrophils and the synthesis of IL-1, IL-6.

Among the group 1 drugs, 5-ASA sulfasalazine is currently not considered the drug of choice because of side effects related to the sulfapyridine molecule (nausea, dizziness, itching, and allergic reactions). Among relatively modern preparations: mesalazine, olsalazine are chosen [4]. The dose of mesalazine is adjusted until the patient has a clinical effect (2.4-4.8 g/day during the loading period and 2 g to maintain remission). There are various forms of these drugs, suppositories are used more often in proctitis, and microclysms in left-sided lesions. The tablet form of mesalazine is coated with a special chemical substance and degrades only at pH=6.5. This means that the drug has a clear effect on the affected area of the intestine and is highly effective.

Group 2 drugs accumulate in the affected area, stop the production of arachidonic acid, block the synthesis of prostaglandins and leukotrienes, and suppress the chemotaxis of cells of the immune system [5]. When mesalazine drugs are administered orally, their effectiveness decreases until the drug enters the rectum, which can be an indication for the use of drugs in the form of rectal suppositories. Therefore, the localization of the affected area should be taken into account when recommending 5-ACE preparations. In rectal ulcerative colitis, the suppository form of mesalazine is recommended, and in left-sided colitis, the form of enema and foam is recommended. The enema form of mesalazine allows the medicine to spread retrogradely throughout the large intestine. However, in some patients, the inability to hold even 50 ml of liquid due to intestinal inflammation and tenesmus makes it inconvenient to use the medicine in the form of an enema. In such cases, the use of an aerosol form has a good effect [6] . Aerosols are very convenient because they completely cover the affected area, have a clear effect and do not give the feeling of additional volume, as in the case of injections. Foam with high viscosity quickly spreads to the intestinal mucosa and is stored for a long time. This leads to the retention of the active substance in a high concentration and an increase in the effectiveness of the treatment. Medicines in foam form do not cause discomfort for patients because they are easier to keep in the intestines for a certain period of time compared to enemas [7]. Usually, in order to increase the effectiveness of treatment, mesalazine is used in a combination form, that is, both orally and rectally [8,9].

Group 3 drugs are an adjunct in the treatment of NSUC and are mainly recommended for hormone-dependent patients. This group includes the following drugs: azathioprine, methotrexate, cyclosporine. 6-mercaptopurine (1-1.5 mg/kg) and azothioprine (2-2.5 mg/kg) are first-line drugs, they are very convenient and effective when used together with glucocorticosteroids. Methotrexate is used for 2nd-line drugs. This drug is used in 25-30 mg/week when the patient is more sensitive to other drugs, or when a quick effect is needed. The amount of the drug is gradually reduced and a maintenance dose of 15 mg is recommended [10].

Drugs of the 4th group are modern biological gene engineering drugs, which are more specific and highly effective compared to the drugs of the previous group. From the FNO-α inhibitors: Infliximab and Adalimumab, golimumab has a selective effect on inflammatory sites and has an immunomodulating effect on the affected area. This type of treatment is used in cases where the effectiveness of the standard treatment is very low, because the drugs used are expensive and it causes inconvenience to the patients. In addition, there is a high risk of antigen formation to anti-FNO-α drugs [11,12,13]. The last recommendations show treatment with α4β7-integrin inhibitors in primary anti-FNO-α resistance (vedolizumab). Secondary resistance to FNO-α is associated with a decrease in drug concentration. This problem is solved by increasing the amount of the drug or increasing the number of its receptions. Currently, new drugs with a high mechanism of action, practically proven, are being discovered. There is also a method of surgical treatment of NSUC, taking into account the difficulty of complete treatment

of autoimmune diseases, recurrence, the surgical method should be used only when conservative treatment does not help and is complicated [14,15,16]. Treatment is usually divided into 2 stages:

1. Treating the disease and achieving remission (induction therapy)
2. Maintenance therapy

For a long time, the treatment of inflammatory bowel diseases was limited to glucocorticosteroids and immunosuppressants [17]. Due to the use of glucocorticosteroids and early surgery in the treatment of severe CA, the mortality decreased from 31-61% in the 1950s and 5-9% in the 1960s [17]. The severity of the patient's condition requires intensive treatment, and in some cases, an urgent surgical procedure aimed at removing the colon and saving the patient's life. Although the main goal of conservative treatment is to stop glucocorticosteroids and achieve permanent remission, the classification of CKD based on the response to hormonal therapy makes it easier to choose rational treatment tactics. creates [18] It is divided according to the response to the treatment: 1. Hormone resistant: a. In a severe attack of the disease - if no positive changes are observed in clinical and laboratory indicators despite the use of 2 mg/kg GKS per body weight for 7 days; b. In the late-moderate form, when disease activity is maintained when 1 mg/kg of body weight is given orally for 2 weeks. 2. Hormone-dependent: a. Increase in disease activity when the amount of GKS is reduced after initial remission is achieved within 3 months after the start of treatment. b. Relapse of the disease after discontinuation of GKS treatment within 3 months. Cytomegalovirus in biopsy samples taken from affected areas of the colonic mucosa using the polymerase chain reaction method to change the treatment of UC in patients with severe attacks of UC, as well as in cases of hormonal dependence, immunosuppressants, or resistance to treatment with immunosuppressants or genetically engineered biologics, when the response to immunosuppressant treatment decreases A DNA study is recommended. Despite the fact that half a century has passed since GKS have been used in the treatment of CKD, until now they are widely used drugs, especially during an attack of the disease. Despite the positive results of GKS, many patients develop hormonal resistance or dependence.Increasing our understanding of the molecular basis of this adverse effect will help to develop new selective GCS treatments based on the patient's genetic background and cytokine profile [19-27].

LIST OF REFERENCES USED

1. Tarasova, E.N. Analyz assortment of lekarstvennyx sredstv dlya lecheniya yazvennogo kolita legkoy i sredney stepeni tyagesti // Vestnik farmatsii. — 2021. — No. 3. — P.21-31.
2. Tulashev K.A., Nurmatov S.T., Navruzov B.S. Otsenka effektivnosti khirurgicheskogo lecheniya bolnyx nespecsificheskim yazvennym kolitom // Forcipe. — 2019. — No. 2. — S. 34.
3. Khalif I.L., Nanaeva B.A., Golovenko A.O., Golovenko O.V. Otdalennye rezultaty konservativenogo lecheniya bolnyx s tyajelym obostreniem yazvennogo kolita // Terapevticheskiy arxiv. – 2015. - No. 87(2). - S. 34-38. https://doi.org/10.17116/terarchy201587234-38.
4. Khalif I.L., Shapina M.V. Efficacy of vedolizumab in chronic pain // Ros. Journal. Gastroenterology, hepatology, coloproctology. 2016; 26 (6): 92–100.
5. Shapina M.V., Poletova A.V., Baranova T.A. Effektivnost i bezopasnost ozanimoda v lechenii yazvennogo kolita // Koloproctologiya. — 2022. — No. 3. — S. 119-129.
6. Shelygin Yu.A. i dr. Klinicheskie rekomendatsii po coloproctologii // Associatsiya coloproctologov Rossii — Moscow. -2017. — S.1-51.
7. Bickston SJ, Behm BW, Tsoulis DJ, Cheng J, MacDonald JK, Khanna R, Feagan BG. Vedolizumab for induction and maintenance of remission in ulcerative colitis Cochrane Database Syst Rev. – 2014. - #8(8).

8. Danese S, Siegel CA, Peyrin-Biroulet L. Review article: integrating budesonide-MMX into treatment algorithms for mild-to-moderate ulcerative colitis // Aliment Pharmacol Ther. – 2014. - No. 39(10). - R.1095-103.
9. Dignass AU, Gasche C, Bettenworth D, et al. European consensus on the diagnosis and management of iron deficiency and anemia in inflammatory bowel diseases // J Crohn's Colitis. - 2015. - #9. - R.211-22.
10. Kaplan GG Globalization of inflammatory bowel disease: perspectives from the evolution of inflammatory bowel disease in the UK and China // Lancet Gastroenterol Hepatol. — 2016. — No. 1. — P. 307-316.
11. Metan G, Türe Z, Kaynar L. Tigecycline for the treatment of Clostridium difficile infection refractory to metronidazole in haematopoietic stem cell transplant recipients // Journal of Chemotherapy. – 2015. - No. 6(27). - R.354-357.
12. Mulder DJ, Noble AJ, Justinich CJ, Duffin JM. A tale of two diseases: the history of inflammatory bowel disease // J Crohn's Colitis. – 2014. - No. 8(5). – R.341-8 DOI:10.1016/j.crohns.2013.09.009.
13. Oral budesonide for induction of remission in ulcerative colitis // Cochrane Database Syst Rev. – 2015. - #26(10):CD007698.
14. Sandborn W SB, D'Haens GR, et al. Efficacy and safety of oral tofacitinib as induction therapy in patients with moderate to severe ulcerative colitis: results from two phase 3 randomized controlled trials // Gastroenterology. - 2016. - R.157.
15. Sandborn WJ, Baert F., Danese S. et al. Efficacy and safety of vedolizumab subcutaneous formulation in a randomized trial of patients with ulcerative colitis // Gastroenterology. — 2020. — Vol. 158, No. 3. — P. 562-572.
16. Sandborn WJ, Su C, Sands BE, et al. OCTAVE Induction 1, OCTAVE Induction 2, and OCTAVE Sustain Investigators. Tofacitinib as induction and maintenance therapy for ulcerative colitis // N Engl J Med. - 2017. - #376. - R. 1723-36.
17. Sands BE et al. DOP026 Efficacy and safety of dose escalation to tofacitinib 10 mg BID for patients with ulcerative colitis following loss of response to tofacitinib 5 mg BID maintenance therapy: results from OCTAVE open // Journal of Crohn's and Colitis. - 2018. - No. 12(6). – R.S049, https://doi.org/10.1093/ecco-jcc/jjx180.063
18. Schmidt E, Kochhar G, Hartke J, et al. Predictors and Management of Loss of Response to Vedolizumab in Inflammatory // Bowel Disease Inflamm Bowel Dis. - 2018. - R.18.
19. Timmer A, Patton PH, Chande N, et al. Azathioprine and 6-mercaptopurine for maintenance of remission in ulcerative colitis // Cochrane Database Syst Rev. - 2016. - R.478.
20. Abdullayev R. B., Makhmudova L.I. Features of Chemical Elements in Various Forms of Irritable Bowel Syndrome // Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 2, 2021, Pages. 2993 – 3000.
21. Abdullayev R.B., Makhmudova L.I. Micro elemental imbalance in irritable bowel syndrome and IBS correction. Academicia. Vol. 11, Issue 5, May 2021:655-662.
22. Abdullayev R.B., Makhmudova L.I., (2021). Assessment Of Clinical And Psychological Status And Quality Of Life Of Patients In Different Forms Of Irritable Bowel Syndrome. The American Journal of Medical Sciences and Pharmaceutical Research, 3(02), 127-134.
23. Makhmudova L.I, Akhmedova N.Sh. Irritable bowel syndrome: a new look at the problem // Academicia. 10.5958/2249-7137.2020.00983.0. 433-38.
24. Makhmudova L.I., Akhmedova N.Sh., Ergashov B.B. Clinical manifestation of irritable bowel syndrome. Art of medicine. International medical scientific journal. Vol. 1, Issue 2. 2021:24-33.

INTERNATIONAL JOURNAL OF
INTEGRATIVE AND
MODERN MEDICINE

25. Makhmudova L.I., Ismatova M.N., Mukhamedjanova M.H., Sulaymonova G.A. Evaluation of microelement status and IBS correction with irritable bowel syndrome. New day in medicine. 2(34) 2021:325-331.

26. Makhmudova L.I., Shazhanova N.S., Akhmedova N.Sh., (2021). Clinical Features Of Irritable Intestinal Syndrome. The American Journal of Medical Sciences and Pharmaceutical Research, 3(04), 154-159.

27. Makhmudova L.I., Sharipov J.N. State of intestinal microflora in irritable bowel syndrome. Tematics journal microbiology. Vol.6, Issue 1. 2022:104-109.