

Clinical effect of sulfasalazine in adjuvant treatment of ulcerative colitis

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Keywords: Sulfasalazine, adjunctive therapy, ulcerative colitis

Abstract: The incidence of ulcerative colitis is concentrated in those with a high educational level such as universities. The incidence is mainly young and middle-aged, and the occupational pressure is high, such as teachers and technicians, and the incidence of ulcerative colitis is not obvious in men and women. Difference; the disease can occur at any age, but more common in young adults. Its main symptoms are stool mucus pus and blood, abdominal pain, increased stool frequency, fatigue, loose stools, poor sleep, dry mouth, cold body and cold limbs, impatience, tenesmus, etc. **OBJECTIVE:** This study compared mesalazine and sulfasalazine to study the systematic review of sulfasalazine in the adjuvant treatment of ulcerative colitis. **Methods:** A total of 62 patients admitted to the hospital were selected and divided into two groups by random number method. They were treated respectively. The treatment effect, the frequency of defecation, diarrhea, abdominal pain and the incidence of adverse reactions were compared between the two groups before and after treatment. **Results:** The two groups of patients were compared after treatment, and the difference was statistically significant. The results showed that by comparing and analyzing the gender, age and other basic data of the two groups of patients, the curative effect of sulfasalazine was better, and the difference was not statistically significant ($P>0.05$), which was comparable.

1. Introduction

Ulcerative colitis is a non-specific inflammatory colon disease, the lesions are mainly concentrated in the rectum, and gradually develop to the descending colon. In general, the etiology of ulcerative colitis is characterized by significant complexity, and recurrent episodes are common, which has a serious impact on the normal life and work of patients [1]. At present, it is clinically believed that the disease may be related to multiple factors such as immunity, environment, spirit, psychology, etc. UC can lead to different degrees of diarrhea, abdominal pain, anemia, fever, mucus, pus and blood in the stool and other symptoms, which seriously affects the quality of life of patients. As the disease progresses, the entire colon can be involved. Through a comprehensive understanding of the incidence of ulcerative colitis in my country in recent years, it is found that the incidence of this

disease is high, and it shows a trend of increasing year by year, which reduces the quality of life of patients [2]. If ulcerative colitis is left untreated, it can become cancerous [3]. The current treatment of ulcerative colitis, drugs are the main means. In recent years, the incidence of this disease in my country has been on the rise [4]. Clinically, aminosalicylic acid drugs are mainly used for treatment, including mesalazine, oxalazine, sulfasalazine, etc. There are differences in the clinical efficacy of different drugs [5]. At this stage, the pathogenesis of ulcerative colitis has not been fully clarified. Relevant scholars believe that under the influence of related factors, such as intestinal bacterial infection, environmental factors and immune imbalance, it is very easy to induce the disease. In clinical manifestations, Symptoms include diarrhea and abdominal pain. How to effectively improve the therapeutic effect of UC is of great significance [6].

2. Ulcerative colitis and related research data

2.1 Brief description of ulcerative colitis

Ulcerative colitis is a chronic nonspecific ulcerative colitis, a type of inflammatory bowel disease. The symptoms are mainly abdominal sea, abdominal pain, pus and blood spots in the stool, and fatigue, abdominal chills and other symptoms. Ulcerative colitis (UC) is one of the most serious diseases in the gastrointestinal tract, and has been listed as one of the intractable diseases by modern medicine by WHO (World Health Organization) [7]. The main clinical features of this disease are diarrhea, abdominal pain, mucus pus and bloody stool, tenesmus, and may be accompanied by systemic symptoms of varying degrees, such as fever, anemia, water and electrolyte balance disorders, etc. Colonoscopy is often accompanied by mucosal congestion, edema, and bleeding. Multiple erosions and ulcers are also seen [8]. It is one of the modern intractable diseases due to its long course of disease, frequent recurrence, long treatment time and difficult treatment. In recent years, the incidence of sick colitis has been on the rise.

Ulcerative colitis is one of the high-risk factors for colorectal cancer, and colorectal cancer accounts for 15% of the mortality rate of ulcerative colitis. The incidence rate in my country is gradually increasing [9]. Exploring the pathogenesis of ulcerative colitis is the basis for effective treatment of this disease, but its pathogenesis has not been fully clarified, and studies have found that it is mostly related to immune, genetic, environmental and other factors. The disease is "intestinal seclusion" and "red fertile". When the yin receives it, it enters the five viscera, and when it enters the five viscera, the abdomen is full and occluded, the lower part is the mother's discharge, and after a long period of time, it is the bowel speech [10]. Can be classified as "diarrhea", "dysentery", "intestinal stagnation" and other TCM disease names, the disease is mostly related to the lung, spleen, liver and kidney. The victory of Shaoyin, the abdominal fullness and pain, is known as Chiwo. Similar manifestations of UC are called "big sputum" and "small intestine bleed", such as "small intestine bleeds and pus and blood in the stool, less abdominal pain, and large bleed, tenesmus, and can't defecate, and pain in the stem".

2.2 Related research materials

54 UC patients admitted to the hospital from January 2018 to October 2021 were selected as the research objects [11]. There were 29 male patients and 25 female patients. The average age is (40.2 5.5) years. In the degree of onset, the cases of mild, moderate and severe cases were 50, 30 and 20 respectively. In the lesion site, the cases of rectum, rectum, sigmoid colon and whole colon were 40, 31 and 25 respectively. The duration of the disease ranged from 1 month to 7 years, with an average duration of (20.18 5.27) months. There were 32 cases in active stage and 8 cases in remission stage. All were consistent with the diagnostic criteria of ulcerative colitis; Age 18 ~75 years; The diagnosis

was confirmed by barium meal enema, disease examination and endoscopy. Informed consent to this experiment, and signed the informed consent form voluntarily. To compare the curative effects of mesalazine and sulfasalazine. The clinical symptoms of the patients were bloody stool in 12 cases, diarrhea in 20 cases and abdominal pain in 30 cases [12]. The medical records are abdominal pain, diarrhea, mucous pus and bloody stool; No serious heart, liver, kidney and other organic diseases, coagulation disorders, systemic infection. The patient's mental function is normal. The course of disease is 0.5 ~ 8.7 years, with an average of (4.3 1.1) years. There were 18 male patients and 13 female patients in the observation group.

Combined with treatment methods, they were divided into observation group (27 cases) and control group (27 cases). The patient had not received UC treatment within 2 weeks before the treatment, and had a clear consciousness, no mental illness or cognitive impairment, and good compliance. People with progressive diseases; Patients with severe heart, lung, liver and kidney diseases; Complicated with serious complications; Patients with diseases of blood system or endocrine system. By comparing and analyzing the basic data of the two groups of patients such as gender and age, the difference is not statistically significant ($P>0.05$), and it is comparable. According to the research in this paper, sulfasalazine has better curative effect. There are contraindications of mesalazine and sulfasalazine for patients; Patients with other digestive diseases, such as gastric cancer, gastrointestinal stromal tumors, etc. Women in lactation and pregnancy; Patients with severe liver and kidney diseases or severe infectious diseases should be excluded.

3. Discussion of methods and results

3.1 Method

The control group was given routine treatment, followed by sulfasalazine, and orally taken sulfasalazine enteric-coated tablets. In acute attack, the initial dose was 1 ~ 3g /d, once a day, and if the symptoms were not obvious, it was gradually increased to 5 ~ 6g/d. Patients in the observation group were treated with mesalazine, that is, mesalazine enteric-coated tablets, 1g/ time, which can't be chewed when swallowed. After 5 weeks of continuous administration, the dosage was adjusted to 0.5g/time, and the treatment continued for 4 weeks. Patients in both groups were treated for 2 months, and the clinical effects of the two groups were observed. Including abdominal distension, frequency of defecation, urgency and heaviness, stool traits, abdominal pain, bloody stool and other main symptoms before and after treatment, and score them. The lower the score, the better the effect. Meanwhile, the adverse reactions of the two groups were recorded and compared. The scores of colonoscopy and the level of C-reactive protein (CRP) were observed before and after treatment. Colonoscopy score: 0: no active lesion was found; 1: see slight tissue lesion; 2 points: see the lesion of medium tissue; 3: See severe tissue lesions.

The symptom disappearance time, serum CRP (C- reactive protein), IL-6 (interleukin -6) and tumor necrosis factor (TNF- α) levels of the two groups were compared and observed. During the treatment, keep a light diet, avoid eating cold, spicy and irritating foods, keep a relaxed and cheerful attitude, and take proper physical exercise. The obvious effect is that the clinical symptoms such as abdominal pain, purulent bloody stool and the like of the patient disappear, and the frequency of defecation is obviously reduced < 2 times a day, which is negative by blood routine test and normal by colonoscopy. The effective stool was negative, the ulcer surface was slightly inflamed, and the symptoms and signs were obviously relieved. Invalid stool routine examination, no change in colonoscopy, no improvement in symptoms and signs. Meanwhile, the complications of the two groups were observed. In the determination of CRP, immune turbidimetry was used, and IL-6 and IL-8 were detected by enzyme-linked immunosorbent assay. The treatment effect, the frequency of defecation, diarrhea and abdominal pain before and after treatment and the incidence of adverse

reactions were taken as evaluation indexes, and the treatment effect was evaluated. All data were statistically analyzed by SPSS17.0 software.

3.2 Discussion of results

Ulcerative colitis is a common and frequently-occurring disease in clinical practice. Because it is a nonspecific disease, patients present with a variety of clinical symptoms, such as fatigue, gastrointestinal discomfort, loss of appetite, vomiting, and diarrhea. Clinically, ulcerative colitis is one of the inflammatory bowel diseases. The etiology is not yet clear. It is very likely that genetically susceptible individuals may damage the intestinal mucosa through exogenous factors, resulting in edema and anemia. Patients with poor function may even promote the appearance of cancer, and the daily adjustment and feedback of patients are seriously imbalanced. Ulcerative colitis is a non-specific chronic inflammatory disease of the intestinal mucosa, which is characterized by repeated disease, easy recurrence, and prolonged non-healing. Affect the treatment of a patient's disease. The clinical efficacy comparison of the two groups of patients is shown in Table 1.

Table 1: Comparison of clinical efficacy between the two groups of patients

Group	show effect	Effective	Ee invalid
Control group	27	33	14
Observation group	50	29	21

In the current clinical diagnosis and research process of ulcerative colitis, the pathological mechanism of ulcerative colitis has not been fully explained. Ulcerative colitis is a chronic non-specific inflammatory disease that invades the colonic mucosa. Sulfasalazine is a widely used clinical drug for the treatment of ulcerative colitis. After the patient takes it, it can be decomposed into 5-aminosalicylic acid and sulfapyridine, which mainly affects the synthesis process of prostaglandins, thereby reducing inflammation., has a certain therapeutic effect on peptic ulcer and ulcerative colitis. The comparison of histological scores before and after treatment in the two groups is shown in Table 2.

Table 2: Comparison of histological scores between the two groups before and after treatment

Group	Before therapy	After treatment
Control group	2.67	0.92
Observation group	3.31	0.95

The disease seriously affects the physical and mental health of patients and reduces the quality of life. It can be seen that using effective methods to actively treat the disease has very important clinical significance for improving the quality of life. In the pathogenesis of the disease, the stomach and intestines are mainly affected by antigen triggers, such as pathogens, toxins, etc., to activate local immune cells in the digestive tract, and under the influence of long-term exposure to non-pathogenic bacterial antigens and food antigens in the intestinal lumen, It is not conducive to the control of the immune response of the body, resulting in the emergence of cross-immune reactions, and it is difficult to ensure a high balance between inflammatory mediators and protective factors, thereby causing repeated mucosal tissue damage and eventually causing ulcerative colitis.

Ulcerative colitis belongs to the categories of "dysentery", "intestinal diarrhoea" and "diarrhea" in traditional Chinese medicine. The theory of traditional Chinese medicine believes that this syndrome is caused by chronic diarrhea and damage to the spleen., Anorexia, nausea, fatigue, loose stools, pale tongue, white coating, slow pulse, so clinical treatment should be based on "spleen and diarrhea". The clinical symptoms of ulcerative colitis vary in severity, some patients have alternating symptoms of remission and attacks, some patients have only colonic symptoms, and some patients have systemic

symptoms. With widespread clinical application, it has been observed that patients are prone to adverse reactions such as abdominal pain, diarrhea, and bloody stools during the course of taking the drug, which can seriously affect the absorption of the drug and the therapeutic effect.

4. Conclusions

In conclusion, sulfasalazine can effectively improve the therapeutic effect of ulcerative colitis, and has a positive effect on improving the symptoms and signs of ulcerative colitis in patients. Clinical studies have shown that the active ingredients of sulfasalazine are mainly 5-aminosalicylic acid, and part of sulfadiazine is a carrier molecule. Sulfasalazine is the drug of choice for the clinical treatment of ulcerative colitis. Its main component is 5-aminosalicylic acid (5-ASA), which can directly act on the intestinal inflammatory mucosa and inhibit the synthesis of prostaglandins by inflammatory cells. and leukotrienes to achieve anti-inflammatory effects. It stays in the intestinal wall for a long time, inhibits the synthesis of prostaglandins, reduces the release of other inflammatory mediators such as leukotrienes, and has significant antibacterial and anti-inflammatory effects, as well as immunosuppressive effects. It can directly act on the mucosa with inflammatory changes, can effectively inhibit the synthesis of prostaglandins that cause inflammatory symptoms, and also block the synthesis of leukotrienes, the mediator of inflammatory symptoms, thereby achieving anti-inflammatory effects. Total effective rate = apparent rate + effective rate.

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