Scholar Publishing Group
International Journal of Health and Pharmaceutical Medicine
https://doi.org/10.38007/IJHPM.2023.040104
ISSN 2789-8393 Vol. 4, Issue 1: 31-43

Analysis and Nursing Care of Chronic Diarrhea Patients with Negative Colonoscopy

Hedjazi Djalal*

Univ Batna2, Comp Sci Dept, LaSTIC Lab, Batna 05078, Algeria

**corresponding author*

Keywords: Chronic Diarrhea, Colonoscopy of Patients, Microscopic Colitis, Organic Lesions

Abstract: Chronic diarrhea is a common clinical symptom in the digestive system, which usually manifests as abdominal discomfort and increased stool. Microscopic colitis is a group of clinicopathological syndromes characterized by chronic watery diarrhea, normal colonic mucosa under colonoscopy, and special changes under colonoscopy. The incidence of microscope colitis is increasing year by year. Colonoscopy of patients with microscope colitis is generally normal or roughly normal, and chronic diarrhea is similar to microscope colitis in clinical symptoms, so microscope colitis is easily misdiagnosed as chronic diarrhea, and the misdiagnosis rate is as high as 80%, but two The treatment principles of the two diseases are different, so the differential diagnosis of the two diseases has important clinical significance. Based on this, this article mainly studies the proportion of microscopic colitis among patients with negative colonoscopy, analyzes whether chronic diarrhea and microscopic colitis are related to gender, and finally counts the number of patients with microscopic colitis. In the case of no cure, self-healing after one year, and research on the treatment and care of the two diseases. In this article, 1500 patients with chronic diarrhea who came to our hospital for examination were used as the experimental group of this experiment, and the endoscopic results of 1230 normal people were used as the control group of this experiment, and the ratio of gender in the experimental group with negative colonoscopy was analyzed. , And performed a microscope colitis examination on patients with chronic diarrhea who were colonoscopy-negative, and analyzed the ratio of patients with microscope colitis and only colitis-negative chronic patients among these people, and obtained the following results: In 1500 cases of chronic diarrhea Among the patients, 55% had colonoscopy organic disease, and among these 55% patients, 33% showed microscopic colitis. The proportion of women suffering from microscopic colitis was the same as that of male patients. Almost, $P>0.05$, no statistical significance. The prognosis of microscopic colitis is good and it is a benign disease.

1. Introduction

Chronic diarrhea is a common clinical symptom, not a disease. The course of diarrhea is usually more than 2 months or repeated diarrhea, with an interval of 2-4 weeks. The etiology of chronic diarrhea is complex and the course of disease is long. According to the etiology, clinical symptoms and treatment principles are different [1]. Chronic diarrhea includes systemic diseases, liver, gallbladder, pancreatic diseases and gastrointestinal diseases. Systemic diseases include diabetes, diarrhea, gastrointestinal autonomic neuropathy, rapid intestinal peristalsis, dyspepsia, frequent defecation, and even autoimmune diseases caused by hyperthyroidism, chronic renal insufficiency and diarrhea. Gastrointestinal diseases include gastrointestinal tumor, inflammatory bowel disease, functional irritable bowel syndrome, functional diarrhea, infectious intestinal tuberculosis, amoebic bowel disease, chronic bacillary dysentery, fungal infection, drug interaction, etc., which can lead to chronic diarrhea. Diarrhea is characterized by abdominal discomfort, which often occurs around the navel. It is aggravated after meals or before defecation. There are no acute sequelae. The amount of stool is large, the color is light, and the frequency is more or less. Diarrhea caused by colon diseases is characterized by abdominal discomfort, which is located in the abdomen or both sides of the abdomen. After defecation, it is often relieved. Patients with rectal diseases are often accompanied with fatigue. Due to the different etiology of diarrhea, the accompanying symptoms are also different, such as heat, weight loss, abdominal mass and so on. The examination of chronic diarrhea included blood urine test, intestinal absorption function test, pancreatic function test and abdominal ultrasound examination. According to the causes of the disease, the diagnosis was made comprehensively [2,3].

Colitis examination is a common endoscopic retrograde examination, including rectal insertion, sigmoid examination, ascending, descending, lateral, cecum, and weak connection between intestine and large intestine (back). It can clearly detect intestinal lesions, and some intestinal diseases can also be treated [4]. For example, colon polyps and other benign lesions can be directly removed under the microscope, which can prevent and remove foreign bodies in the large intestine. Generally, the electronic lens array and the electronic lens array are integrated into the image conversion system. Through the small lens system, the target image is observed on the photoelectric sensor array, and then the received image signal is sent to the image processing system, and the image is output to the monitor for processing. Indications of colonoscopy: gastrointestinal symptoms such as constipation, chronic diarrhea, chronic defecation habits change, abdominal pain, abdominal distension, abdominal mass and other lower gastrointestinal symptoms cannot be clearly diagnosed. X-ray barium enema examination suspected ileum and colon terminal lesions, uncertain or pathological changes. X-ray barium enema was negative, but there were obvious intestinal symptoms or suspected malignant lesions, such as low colectomy, colonoscopy and colonoscopy. For patients who need anastomosis, regular colonoscopy, polypectomy and drug treatment for inflammatory bowel disease, intraoperative colonoscopy assisted exploration and treatment of intestinal diseases, and colorectal cancer screening were performed regularly. Colonoscopy onset is slow, a few can acute attack, the course of disease is chronic, lasting for more than 10 years, frequent attacks, remission gradually replace or continue to deteriorate, occasionally acute attack, clinical manifestations: diarrhea: mucus pus blood, stool, young people 3-4 times a day, dozens of people or alternate diarrhea and constipation. Abdominal pain: mild patients have no abdominal pain or only abdominal discomfort. General mild to moderate abdominal pain, left lower abdominal pain or lower abdominal pain, there will be a whole abdominal pain meaning constipation link, constipation can be defecated in 4-5 days. Stool is like sheep dung, other symptoms: abdominal distension, weight loss, fatigue, bowel sounds, insomnia, dreaminess, fear of cold, etc. The onset of colitis is not clear, but traditional Chinese medicine believes that colitis is mostly caused by

alternation of damp and heat, deficiency of spleen and kidney yang, deficiency of both qi and blood, imbalance of diet and overwork. There are four types of clinical classification of colitis: mild type, moderate type, severe type and explosive type. The first three types are generally manifested, and the fulminant type is very rare. The clinical classification of colitis is conducive to treatment and prognosis [5-7].

Microscopic colitis is a group of clinical pathological syndrome characterized by chronic watery diarrhea, normal colonic mucosa under colonoscopy and special changes under colonoscopy, including two subtypes of collagen colitis and lymphocytic colitis [8]. The etiology of microscopic colitis is unknown, which may be related to the following factors. The disease is more common in women, family conditions and genetic factors may contribute to the onset and immune response; abnormal immune regulation may play an important role in the pathogenesis of microscopic colitis. Patients may produce antinuclear antibodies or other autoimmune markers, as well as various autoimmune diseases, such as thyroid diseases and rheumatoid arthritis. CDMC may be involved in the reduction of intestinal mucosal immune response and antigen expression. Some drugs, such as nonsteroidal anti-inflammatory drugs and H2 receptor blockers, can lead to microscopic colitis and bacterial infection. Some patients with microscopic colitis have effective antibacterial treatment, and most cases can cultivate bacteria (mainly Escherichia coli), which indicates that bacterial infection is one of the causes of microscopic colitis. Chronic diarrhea usually lasts for more than 3 months, and it often appears as long as 3 months in clinic. In addition, there are weight loss, abdominal pain, periumbilical paroxysmal spasmodic colic, nocturnal attacks. No nausea, vomiting and other gastrointestinal symptoms [9]. Organic disease refers to the etiology and occurrence process of gallstone, cholecystitis, gastritis, stomach and other diseases. This series of diseases have certain parts and are caused by special reasons. A disease of organ or tissue system is caused by many reasons, leading to permanent damage of organs or tissue system. Therefore, when organic diseases appear in the body, drug or surgical treatment is needed, otherwise the disease will continue to deteriorate, even lead to organ failure, affecting life. In addition, no matter the size of organic diseases, we should pay attention to it. The pathological changes of organs or tissues were observed under microscope, and the function of related organs was damaged or lost. The condition is serious, the course of disease is long, the cure is difficult, and gradually expand. Severe cases can lead to death. In digestive tract tumor part, can appear anorexia, emaciation, anemia, hematemesis, hemoptysis and other signs of malignant diseases, occurring in the brain. However, due to tumor lesions such as headache, dizziness, quadriplegia and tumor compression, the heart stops breathing and dies. Moreover, coronary heart disease due to cerebral ischemia, hypoxia and infarction caused substantial damage, with serious consequences [10,11].

In China, there have been few studies on microscopic colitis. As long as the clinical symptoms of microscopic colitis are similar to those of chronic diarrhea, few people choose to go to the hospital for examination. Since the 20th century, China has carried out a large number of related studies, but most of them are small sample studies. In this paper, through the analysis of the characteristic parts of patients with chronic diarrhea, we summarized the colonoscopy results of 1500 patients with chronic diarrhea screened out from June 2010 to June 2020. Among them, to find out the possible causes of chronic diarrhea, so as to evaluate the application value of colonoscopy in patients with chronic diarrhea.

2. Theoretical Basis and Core Concepts

2.1. Epidemiological Characteristics of Chronic Diarrhea

Diarrhea mainly refers to the increase of fecal water content, usually accompanied by the

increase of fecal volume. Normal people usually defecate three times a week, three times a day. When the amount of loose feces exceeds 85%, the frequency of defecation increases (such as more than three times a day), and the amount of feces increases (such as more than 200 grams per day), which can be considered as the difference between diarrhea and "pseudo diarrhea" and fecal incontinence. The former only increases the frequency of defecation, while the amount and water content of defecation do not increase, while the latter is involuntary defecation, usually caused by neuromuscular diseases or pelvic floor diseases [12].

2.2. Pathogenesis of Chronic Diarrhea Epidemiology

Most people eat and secrete it into the gastrointestinal tract every day, and the intestinal tract has a strong absorption capacity. Under pathological conditions, when the amount of fluid entering the ileocecal area exceeds the normal absorption capacity of the colon or reduces the absorption capacity of the intestine, diarrhea will occur. The secretion and absorption of water and electrolytes are essential for maintaining the volume and osmotic pressure of each segment. Plays an important role. The secretion of water and the transport of electrolytes are mainly achieved through passive diffusion (using electrochemical gradients on both sides of the intestine) and active transport solvent traction mechanism [13]. The recovery of intestinal water and electrolytes is regulated by many physiological factors, including the central nervous system, peripheral nervous system and endogenous nervous system. Hormones and mediators include intestinal peptides, neuro-hypertensive drugs, somatostatin, opioid peptides, aldosterone, corticosterone, and prostaglandins. Exogenous substances or pathogens can also affect the secretion and absorption of intestinal solutes through the direct action of their own toxins or the indirect action of activating immune inflammatory mediators. Therefore, the water and electrolyte content of each segment of the small intestine is the result of a comprehensive mechanism of absorption dynamics. When this dynamic balance is broken, even if water eventually enters the rectum, it will increase by hundreds of millimeters every day. According to comparison, diarrhea can be divided into four categories: osmotic, secretory, intestinal motility disorder and exudative diarrhea. It needs to be pointed out that this is not caused by a single mechanism, but the result of a combination of multiple factors [14].

2.3. Clinical Characteristics of Microscopic Colitis

The most common symptom of microscopic colitis is chronic or intermittent mild to severe watery diarrhea, accompanied by dehydration and electrolyte abnormalities. Other common symptoms include abdominal pain, weight loss and joint pain. Weight loss is usually a mild symptom, but if it is severe, it is more likely to be diagnosed with other diseases, such as abdominal disease. Affected by diarrhea, abdominal pain, sense of urgency, fecal incontinence and other gastrointestinal symptoms, and fatigue, joint pain, myalgia and other systemic symptoms, the quality of life will decline to the same level as other chronic intestinal diseases such as inflammatory bowel disease. The symptoms of microscopic colitis are nonspecific, and many patients meet the diagnostic criteria for irritable bowel syndrome. Therefore, these criteria are not for irritable bowel syndrome. Colon biopsy requires a clear distinction between microscopic colitis and the more common irritable bowel syndrome. However, the high or low risk of microscopic colitis can be determined by certain clinical characteristics, such as age, gender, use of certain drugs or initiation of any drug treatment, weight loss, night stool and short-term diarrhea. For low-risk patients, antidiarrheal drugs can be used before colonoscopy or mucosal biopsy.

2.4. Epidemic Trend of Microscopic Colitis

Microscopic colitis is more common in people over 50 years old and under 70 years old. A Canadian study found that patients over 65 years old are 5.6 times more likely to be diagnosed with microscopic colitis than young people. However, it has been reported that for patients of different ages, including children, in one study, 25% of patients were under the age of 45. Microscopic colitis is common in patients with chronic diarrhea undergoing colonoscopy. This proportion is higher in the elderly, so all patients with chronic diarrhea, especially the elderly, should consider whether it is microscopic colitis. Most studies have reported that multiple sclerosis is more common in women than in men, the sex ratio of lymphocytic colitis appears to be low, and in some studies, the difference between men and women is not statistically significant. A population-based study in Europe and North America says that incidence rate of colonists is 1 to 25 per 100 thousand people per year, and recent research accounts for a higher proportion. The incidence rate of collagen colitis is 1.1 to 14.9 per 100 thousand people, 1.3 to 12 per 100 thousand people [15]. The incidence rate of Colonists in the microscope increased significantly in twentieth Century, but recent data show that the incidence rate of Colonists in the past 10-15 years is stable. In Denmark and Holland, the incidence rate of microscopic colitis has been increasing. However, this significant increase may also be a diagnostic bias due to the increasing number of microscopic colitis tests.

2.5. Treatment of Microscopic Colitis

The first step for patients with microscopic colitis is to identify factors that may increase diarrhea, such as dairy intake or excessive use of artificial sweeteners in patients with lactose intolerance, and also need to carefully check the list to treat patients, including over-the-counter products, in order to determine the possible causes of MC or addition, however, Most microscopic colitis patients need to treat diarrhea with drugs such as loperamide or phenetamine, which are usually used for mild diarrhea. If these drugs are not successful, or if the patient has moderate symptoms, salicylic acid may be effective. A recent retrospective study found that most patients responded to low-dose bismuth tablets (262mg) three times a day (53% complete remission, 28% partial remission). This study also showed that bismuth may be most effective in patients with mild diarrhea, while another study found that older patients may respond better to bismuth than younger patients. Long term use of bismuth salicylate, especially high doses, may lead to Neurotoxicity. Another treatment is mesalamine. However, a large number of studies have reported that the drug is effective in less than half of patients. Recent controlled trials have shown that mesalamine is not better than placebo, and choline or other bile duct salt binders may be more effective [16].

3. Experimental Analysis and Methods

3.1. Research Object and Grouping

The data source of this experiment is 1500 cases of chronic diarrhea patients collected in our hospital from June 2010 to June 2020 for analysis. These 1500 people all meet the following characteristics: continuous or repeated diarrhea for more than 3 weeks, about 3-5 times a day, with or without abdominal pain, abdominal distension, bloody stool included in the standard; colonoscopy showed no obvious congestion, edema, erosion and swelling. Stool culture was negative, and there was no history of respiratory tract infection or antibiotic use. The inclusion criteria of TCM syndromes refer to the diagnostic criteria of TCM syndromes in TCM clinical diagnosis and treatment and TCM Internal Medicine classification criteria of diarrhea syndrome edited by Tian Delu. Exclusion criteria: liver cirrhosis, hyperthyroidism, diabetes, atrophic gastritis,

chronic pancreatitis, short bowel syndrome, chronic pancreatitis, connective tissue disease.

From June 2010 to June 2020, a total of 1213 cases of colonoscopy were performed in the digestive endoscopy center of our hospital. 1500 cases of chronic diarrhea were included in the chronic diarrhea group, and 2110 healthy people who underwent colonoscopy at the same time were served as the control group. There were 743 males and 757 females with an average age of 43 years (range, 10-87 years). Control group: 453 males and 547 females, aged 9-85 years (mean 46 years). The age of the control group was longer than that of the chronic diarrhea group ($t = 12.685$, $P < 0.001$). There was no significant difference in the sex composition ratio between the two groups ($x^2 = 2.887$, $P = 0.089$).

3.2. Experimental Observation Indexes and Requirements

Before colonoscopy, the patient's condition should be fully understood, whether there are drug allergy and chronic infectious diseases, etc. if the colon is abnormal, enema should be done first to understand the shape of intestinal cavity. The food was light the night before the examination, and no food or water was allowed in the morning of the examination. Preoperative colonoscopy and drug treatment can ensure the smooth operation of colonoscopy insertion. Careful observation and search for lesions, accurate biopsy and fine endoscopic treatment is very important. For some patients with nervous tension, preoperative medication can also help relieve pain and better cooperate with the examination.

In this experiment, the patients were washed with polyethylene glycol or sodium phosphate oral solution, and the last defecation was like water, which reached the experimental standard.

3.3. Reagents and Experimental Instruments

Table 1. Instruments used in the experiment

Experiment Instruments	Supplier
Electronic colonoscopy (OLYMPUS260)	
Masson's modified trichromatic Staining Kit	Shanghai Xinran Biotechnology Co., Ltd
Mouse anti human tenascin monoclonal antibody	Wuhan BOshide company
DNA chromogenic reagent kit	Wuhan BOshide company
Micro distance measurement software	San Antonio Texas Health Science Center

Table 2. Reagents used in the experiment

Experiment Reagents	Experimental formula
10% buffered formalin fixed solution	Formaldehyde 100ml + distilled water 900ml + nah2po4.h204g + Na2HPO4 (anhydrous) 6.5g
SABC	Streptavidin biotin peroxidase complex
0.02MPBS(PH7.2-7.6)	Add 8.5g sodium peroxide, 2.8g Na2HPO4 and 0.4g NaH2PO4 into 1000ml distilled water
Alcohol	75% alcohol, 95% alcohol, anhydrous ethanol
Harris' hematoxylin	Hematoxylin 25g + absolute alcohol 25ml + aluminum potassium sulfate (potassium alum) 50g distilled water 500ml + yellow mercury oxide 125g + glacial acetic acid 20ml

The instruments and reagents used in this experiment are represented by Table 1 and Table 2

respectively.

3.4. Experimental Methods

1. Colonoscopy

Colonoscopy was performed for the patients in the experimental group and the control group to exclude other diseases that cause diarrhea. The diagnosis of microscopic colitis relies on the histopathological findings of normal or edema colonic mucosal tissue biopsy, and cases of abnormal endoscopy are excluded. For patients whose endoscopy is normal, take tissue sections of the colon. If the colonic mucosa is slightly abnormal under colonoscopy, these parts should be avoided during biopsy. In recent years, some hospitals at home and abroad have advocated painless examination, that is, colonoscopy under general anesthesia. Intravenous injection of sedative or anesthetic drugs can make the patient comfortable and quiet. Under light anesthesia, forget the process of microscopic examination, achieve the purpose of painless examination, improve patient compliance, facilitate the operation and diagnosis of doctors, and improve the success rate of examination. Propofol and fentanyl are commonly used. However, perforation, serous tear, hemorrhage, and even prolonged endoscopy can occur under the unresponsive state of general anesthesia. Therefore, the indications should be strictly controlled, and colonoscopy should be gentle.

2. Precautions after Colonoscopy

Air is continuously injected during the colonoscopy to facilitate observation of the intestinal mucosa. After surgery, as air accumulates in the large intestine, the patient may experience abdominal distension and discomfort. These symptoms will gradually subside within a few hours. For patients undergoing colonoscopy biopsy or polypectomy, a liquid diet should be adopted, attention to changes in stool color, and observation for symptoms such as abdominal pain and blood in the stool. If you have persistent abdominal pain or stool bleeding after colonoscopy or endoscopy, tell your doctor and get further treatment if necessary.

3. Histopathological Diagnosis

The tissue sections of all colon parts obtained in experiment method 1 were fixed, cleaned, dehydrated, transparent, embedded and sliced. Then the sections were stained. After staining, the number of intraepithelial lymphocytes was observed under the ordinary microscope. Samples larger than 7 per 100 cells were examined by fluorescence microscopy, Masson trichrome staining and fluorescence microscopy. The number of epithelial cells in each layer was measured by image method. During the experiment, the position of lymph nodes in the photographing area should be avoided. The stained sections were observed by fluorescence microscope. All specimens of colonic mucosa were screened and projected onto the prepared sections by blue excitation with wavelength of 400-500 nm. The subepithelial collagen showed green fluorescence. Observe the vertical area between the section and the epithelial layer, set the standard distance, and mark it. Select collagen under CC microscope and take photos. After taking photos, the thickness of collagen was measured and recorded with image tool software. After taking photos, the thickness of collagen was measured and recorded by image tool software.

3.5. Treatment of Microscopic Colitis

Since the pathogenesis of microscopic colitis is still unclear, and there is currently no specific treatment for microscopic colitis. Due to the good prognosis and high natural remission rate of microscopic colitis, most hospitals generally focus on empirical comprehensive treatment. Since 2002, prospective randomized controlled trials of microscopic colitis have gradually emerged, but the sample size is small and the research has not made good progress. Therefore, the hospital still

has to choose the appropriate treatment method according to the degree of symptoms, possible causes and treatment response, including conventional medication, medication and surgical treatment. Drug treatment is generally antidiarrheal drugs. The symptoms of antidiarrheal drugs are mainly mild symptoms. Obvious symptoms can be treated with bismuth salicylate, 5-aminosalicylic acid, antibiotics, microecological agents and anti-epidemic inhibitors. For stubborn symptoms, corticosteroids can be used. Budesonide is currently the best drug for treating microscopic colitis. Effective drug therapy can significantly improve the clinical symptoms of patients, improve the quality of life, early histopathology, some drug treatments are ineffective, and patients with stubborn symptoms of microscopic colitis may consider colectomy. Because this study is a preliminary study of microscopic colitis, drug treatment intervention, so the patients in this experiment did not treat microscopic colitis.

3.6. Remission of Microscopic Colitis

We mainly through filling in the questionnaire to understand the experimental group with microscopic colitis patients, understand the spontaneous remission of symptoms after 1 year of microscopic colitis diagnosis.

There are three evaluation criteria: complete remission, partial remission and no remission. The complete remission was that the frequency and characteristics of stool returned to normal, and gastrointestinal symptoms disappeared. Partial remission was that the stool frequency returned to normal, the stool characteristics were still water like, and the gastrointestinal symptoms were relieved. There was no improvement in stool characteristics, frequency of defecation and other gastrointestinal symptoms.

All patients and their families agreed to the study and signed the relevant consent.

3.7. Statistical Analysis

The data of this experiment was analyzed by SPSS22.0 statistical software, and the clinical characteristics were analyzed by descriptive statistical analysis methods. The proportion of colonoscopy negative and gender in chronic diarrhea was analyzed. The coverage ratio of colonoscopy negative diarrhea patients and microscopic colitis was analyzed. The constituent ratio was expressed as percentage. $P < 0.05$ was considered to be statistically significant.

4. Experimental Results and Analysis

The experimental data source of this experiment is 1500 cases of chronic diarrhea patients collected in our hospital from June 2010 to June 2020 for analysis, and 1230 cases of normal people as the control group. The endoscopic results in the experimental group showed that 825 Cases of colonoscopy had organic lesions. There was no colonoscopy generator in 1230 normal subjects.

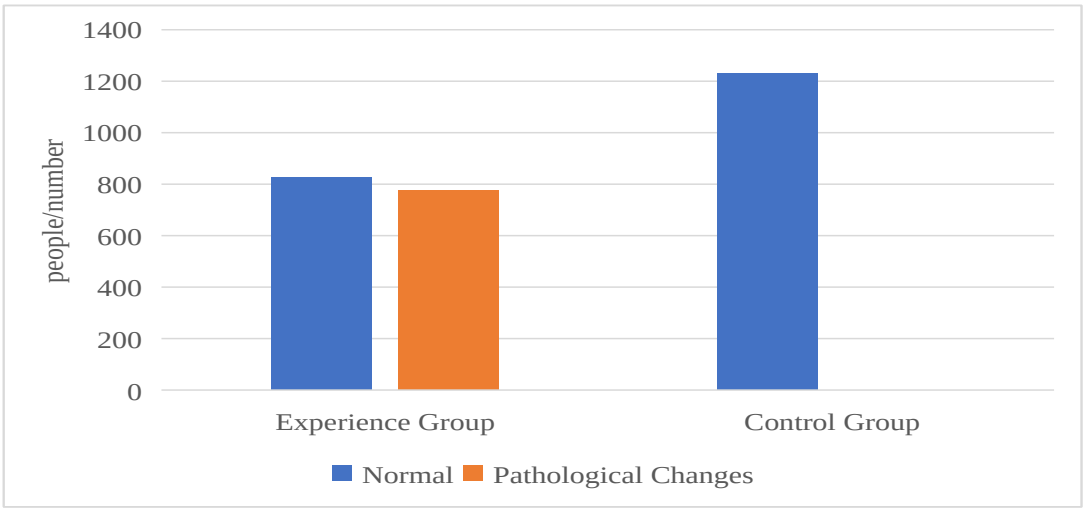

Figure 1. Colonoscopy results

It can be seen from the colonoscopy that all the subjects in the control group had chronic diarrhea. The number of organic lesions in colonoscopy accounted for 55% of the transfusion, $P < 0.05$, with statistical significance.

From the experimental results in Figure 1, we can get this result that it can be seen from the data that that the colonoscopy rate of patients with chronic diarrhea was 45%. Combined with the positive results, although there was no significant difference in the overall proportion of organic lesions and specific organic lesions between the healthy control group and the experimental group with chronic diarrhea, these diseases will lead to chronic diarrhea. Noninfectious enteritis is a common disease except colitis in inflammatory bowel disease and infectious enteritis. The etiology of these diseases is unknown, so the clinical significance of studying chronic diarrhea is limited. Next, we analyze the sex ratio of chronic diarrhea population.

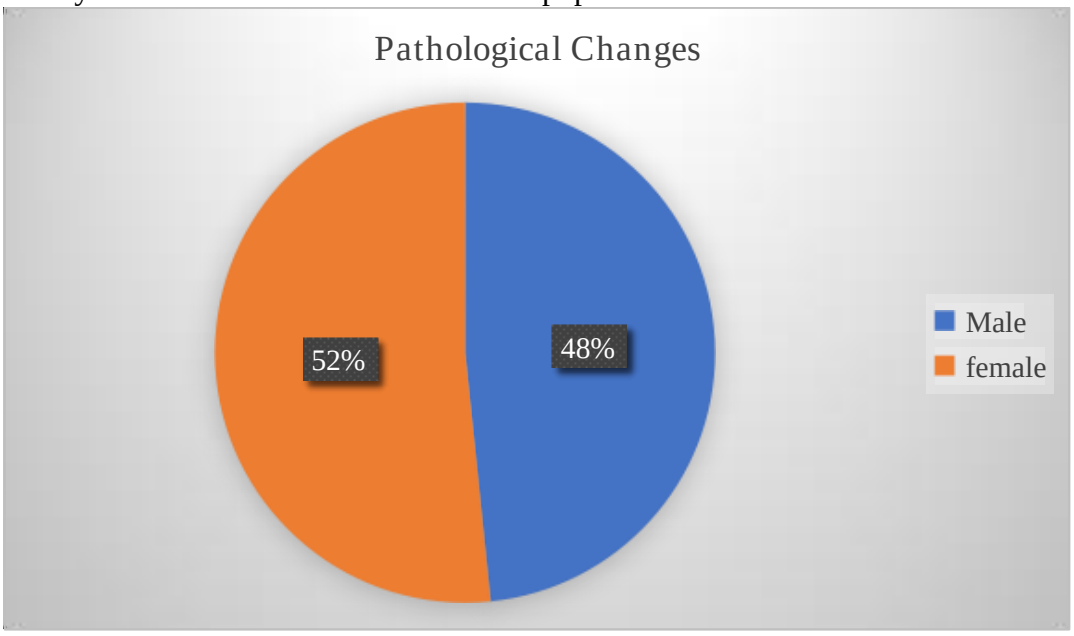

Figure 2. Male to female ratio

In the experimental group, 825 patients with chronic diarrhea had organic lesions in colonoscopy. From Figure 2, we can get this result. It can be seen from the data that there have 52% of the

patients were female and 48% were male, with P > 0.05, There was no statistical significance, indicating that in the process of this experiment, the proportion of negative colonoscopy in chronic diarrhea was not related to gender.

For the method of chronic diarrhea examination, blood routine, urine routine and stool examination are usually carried out in the laboratory. If occult blood and eggs are found in feces, ESR and blood biochemical tests should be carried out at the same time. Gastrointestinal hormone test and imaging examination are the common examination methods of chronic diarrhea. These examinations include abdominal ultrasound, X-ray and barium meal examination. Do not eat or drink water during the examination. In order not to affect the results of endoscopic examination, colonoscopy is widely used in the examination of chronic diarrhea, which is of great significance for the diagnosis of chronic diarrhea. Whether there is obvious gastrointestinal mucosa biopsy is also important for the diagnosis of chronic diarrhea. According to the degree and duration of diarrhea, the duration of diarrhea and the effective duration of intestinal mucosa can be determined.

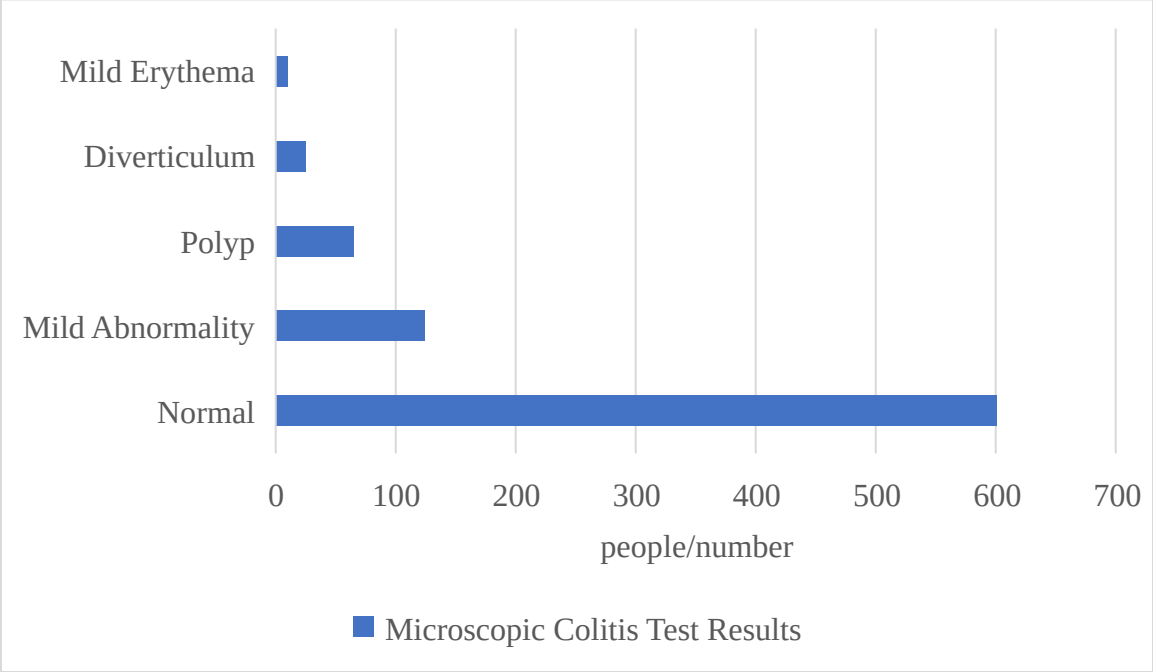

Figure 3. Microscopic examination of colitis

From Figure 3, we can get this result. It can be seen from the data that there are several types of microscopic colitis. In this experiment, 825 people were negative in colonoscopy, and 601 of them showed normal microscopic colitis, indicating that microscopic colitis may also occur if colonoscopy is negative. However, there are more normal cases, indicating that 224 people with chronic diarrhea and microscopic colitis overlap with negative colonoscopy, the overlap is 27%. Among the negative colonoscopy, 124 cases were mildly abnormal, accounting for 15% of the total number of people, accounting for 55% of the abnormal microscopic colitis examination, indicating that half of the people with microscopic colitis were mildly abnormal. There were 65 cases of colonic polyps, 25 cases of diverticulum and 10 cases of mild erythema. The most common microscopic colitis is polyps, accounting for 7.8% of the total number of people.

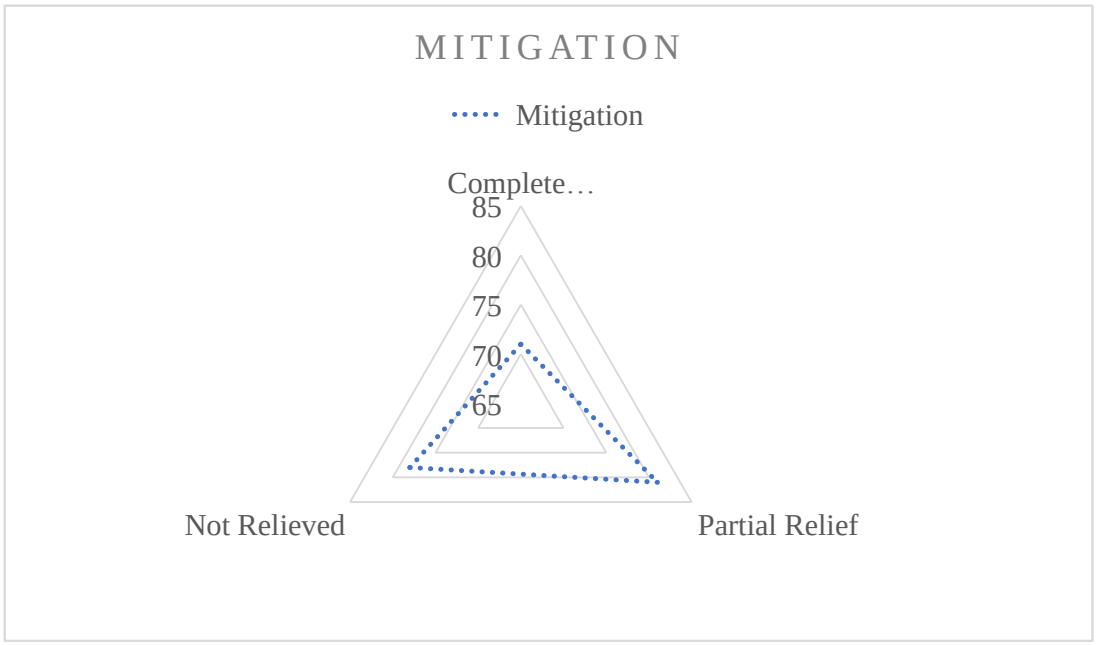

Figure 4. The remission of microscopic colitis was observed after one year

From Figure 4, we can get this result. It can be seen from the data that among 225 people with abnormal microscopic colitis examination results, 71 people had their chronic diarrhea symptoms completely recovered to normal, 81 people had chronic diarrhea symptoms, and 78 people had no remission. One third of the patients have recovered completely. If we assume that 71 of the 124 patients with slight abnormality in the microscopic colitis examination results are fully recovered, it shows that microscopic colitis is not such a serious disease and can be naturally relieved.

The first step in the treatment of patients with microscopic colitis is to determine factors that may aggravate diarrhea, such as milk intake in patients with lactose intolerance or excessive use of artificial sweeteners. The patient's medication list also needs to be carefully checked, including over-the-counter medications, to determine whether it is microscopic colitis medication or other substances, or will aggravate diarrhea. In some patients, identification and elimination of this factor can improve or even eliminate chronic diarrhea.

5. Conclusion

Patients with microscope colitis are a very common disease, very common in our lives, but because the clinical symptoms of microscope colitis and chronic diarrhea are similar, and microscope colitis and chronic diarrhea have self-healing functions, so Many people mistake microscopic colitis for chronic diarrhea and think that diarrhea is not a serious disease, so they don't go to the hospital for examination. This article mainly studies the proportion of microscopic colitis in patients with negative colonoscopy, analyzes whether the two diseases, chronic diarrhea and microscopic colitis, are related to gender, and finally counts the number of patients with microscopic colitis that are not cured In the case of self-healing after one year. In this paper, through a study of 1500 patients with chronic diarrhea symptoms selected from June 2010 to June 2020, it was found that 45% of the colonoscopy had organic disease, indicating that chronic diarrhea is not It will definitely lead to organic colonoscopy. Among the remaining 825 patients with chronic diarrhea with negative colonoscopy, 30% were diagnosed with microscopic colitis. Among the 225 people suffering from microscopic colitis, 30% were self-healing after one year, and 40% Part of the person returned to normal after a year, indicating that microscopic colitis has the characteristics

of automatic healing. Although microscopy is a benign disease, for some patients, treatment is still needed.

Funding

This article is not supported by any foundation.

Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

References

[1] Wu Rong, Li Guoxiong, Yang Wenjun, et al. Analysis of clinical features and related risk factors of microscopic colitis. Chinese Journal of Endoscopy, 2017(11): 101-105.

[2] Tian Xiufeng. Analysis and discussion of the relationship between chronic diarrhea and terminal ileal lesions with negative colonoscopy. Chinese Medical Equipment, 2016(6): 69-71.

[3] Men Lan, Li Changfeng, Zhao Dongmei. Clinical research and prognostic analysis of patients with chronic ulcerative colitis using refined nursing intervention. Journal of Clinical Medicine in Practice, 2017(12): 45-46

[4] Gu Hongxiang. Microscopic colitis screening of patients with chronic diarrhea with negative colonoscopy in southern China. Southern Medical University, 2017(02): 412-414

[5] Baert F, Wouters K, D'Haens G, et al. Lymphocytic colitis: a distinct clinical entity? A clinicopathological confrontation of lymphocytic and collagenous colitis. Gut, 2019, 45(3): 375-381

[6] Fernandez- Banares F, Salas A, Forne M, et al. Incidence of collagenous and lymphocytic colitis: a 5-year population-based study. Am J Gastroenterol, 2019, 94(2): 418-423

[7] Holstein A, Burmeister J, Plaschke A, et al. Autoantibody profiles in microscopic colitis Gastroenterol Hepatol. 2016. 21(6): 1016-1020

[8] Nishida Y Murase K. Isomoto H. et al Different distribution of mast cells and macrophages in colonic mucosa of patients with collagenous colitis and inflammatory bowel disease. Hepatogastroenterology, 2019.49(45): 678-682

[9] Beck P L, MartinG R, Li Y, et al. Unraveling the Link Between Solid Organ Transplantation and the Increased Risk for Developing Inflammatory Bowel Disease, Microscopic Colitis and Celiac Disease. Gastroenterology, 2018.59(43): 78-82

[10] Kaplan GG, Seminowich S, williams J, et al. The risk of microscope colitis in solid-organ transplantation patients: a population-based study. Transplantation, 2016, 85(1): 48-54

[11] Robert M E. Microscopic colitis: pathologic considerations, changing dogma. J Clin Gastroenterol, 2015, 38(5): S18-S26.

[12] Fernandez-Banares F, Salas A, Esteve M, et al. Collagenous and lymphocytic colitis. evaluation of clinical and histological features. response to treatment, and long-term follow-up. Am J Gastroenterol, 2015,98(2) :340-347.

[13] Allende d s, Taylor S L, Bronner M P. Colonic perforation as a complication of collagenous colitis in a series of 12 patients . Am J Gastroenterol,2018,103(10): 2598-2604

[14] Protic M, Jojic N, Bojic D, et al. Mechanism of diarrhea in microscopic colitis. World J Gastroenterol, 2015, 11(35): 5535-5539.

[15] Rossman D A, Camilleri M, Mayer E A, et al. AGA technical review on irritable bowel syndrome . Gastroenterology, 2015, 123(6): 2108-2131

[16] Spiller R, Aziz Q, Creed F, et al. Guidelines on the imitable bowel syndrome: mechanisms and practical management. J]. Gut, 2017, 56(12): 1770-1798