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# CURRENT MANAGEMENT AND TREATMENT OF CROHN'S DISEASE

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## **Abstract**

Crohn's disease (CD) is a chronic inflammatory condition that affects the digestive system whose incidence and prevalence has been increasing in recent years. This pathology has been considered idiopathic, however in recent years it has been seen that it has a close relationship with genetic predisposition. Not knowing it's etiology can generate controversies about which treatment is the most appropriate for solving the objectives, however the treatment focuses on the use of monoclonal antibodies, immunomodulators and even surgical procedures. It is of utmost importance to establish a close doctor-patient relationship in this pathology given the persistence of episodes of remission and relapses.

**Objective**: To describe the updated management and treatment of Crohn's disease.

**Materials and Methods:** A review of narrative literature with a qualitative approach was carried out by searching the literature in electronic scientific databases such as PubMed, VHL, Redalyc, Science Direct, Cochrane. The search strategy was using specific MESH terms and manual keywords as follows: (UPDATE) AND (MANAGEMENT) OR (USE) AND (TREATMENT) AND (CROHN'S DISEASE) OR (INFLAMMATORY BOWEL DESEASE). After the initial search, 822 studies were located, in which 781 articles that were not relevant to the objective of this review were excluded after reviewing the abstract, so we worked with 41 selected articles

**Results:** A total of 41 articles selected through abstract review were used. In the update of the management of the disease, various treatments have been developed aimed at controlling the outbreak and keeping the patient under review through a multidisciplinary approach.

**Conclusions:** The choice of the appropriate treatment for CD is based on multiple factors such as the demographics of the individual, the severity of the disease, and the existence of complications. In this context, doctors need to be up-to-date and familiar with each therapy in order to provide optimal advice to their patients. However, in recent decades, the management of these patients has presented several therapeutic alternatives available, including monoclonal antibody therapies, immunomodulators, and surgery.

Keywords: Crohn's disease, Inflammatory bowel disease, Management, Treatment

#### INTRODUCTION

Crohn's disease (CD) had its first description in 1769 by Giovanni Battista Morgagni, however, it was not until 1932 that it began to spread and be recognized as a specific pathology. This important milestone is due to the publication of the article "*Regional ileitis, a pathologic and clinical*" by Dr. Burrill B. Crohn, who gave his name to the disease, from that moment on, this condition began to be better understood (1,2).

Crohn's disease is a clinical form of inflammatory bowel disease (IBD), which affects the entire digestive tract from the mouth to the perianal area in a segmental and asymmetrical manner (3,4). Similarly, their etiology is unknown and although they have been considered idiopathic, genetic, immunological, environmental factors and an altered gut microbiota have been identified, leading to dysregulated innate and adaptive immune responses (5,6)

That said, CD presents as a prolonged and variable clinical course, which can change in severity and location, depending on the extent and severity of the disease. Its most common form of presentation includes symptoms such as abdominal pain, diarrhea, weight loss, and rectal bleeding, which manifest in a recurrent and remitting manner (7,8).

As for its diagnosis, it is multidisciplinary, since it involves the combination of a series of clinical, analytical, endoscopic or radiological findings that determine its type. CD is described by the Montreal classification, which categorizes patients according to their age at diagnosis, the location of the disease, and the behavior of the disease (9,10).

Despite this, its incidence and prevalence have been increasing in recent years, both in developed and developing countries and vary according to the geographic region and population groups studied, affecting people of all ages, however, a higher incidence has been seen between the second and fourth decade of life (11,12). Currently, no cure for this disease has been established, however, there are several types of specific treatments such as nutritional, pharmacological and/or surgical, whose main objective is to keep the patient in remission (10,13).

Taking into account the above, despite advances in the understanding of this disease, there are still significant challenges in its management and treatment. Consequently, being a field in constant evolution, this research has viability, since it requires continuous and updated research that seeks to optimize clinical results, being essential to improve quality of life, develop new therapies, more effective and personalized treatments and identify and manage comorbidities by providing adequate education and support to patients.

Finally, due to the complexity of the disease, the purpose of this review is to update the management and treatment of the disease by accessing accurate information with the aim of adopting active measures to achieve a timely diagnosis. In addition, it seeks to prevent the progression and deterioration of the disease, as well as enhance the quality of life of affected patients.

#### METHODOLOGY

The present study is a narrative literature review with a qualitative approach, where the management and updated treatment of Crohn's disease is determined.

# Research Question

What are the most effective management strategies and therapeutic approaches used in the treatment of Crohn's disease today?

#### Inclusion criteria

Publications that evaluated the Current Management and Treatment of Crohn's Disease:

- Articles published in the last 5 years (2019-2023).
- Articles published in Spanish, English and Portuguese.
- Level of evidence from one to four according to quality and impact indicators of Scimago publications

#### **Exclusion Criteria**

- Articles that do not meet the inclusion criteria and that, after reviewing the abstract, do not provide information about the research question.
- Duplicate items.
- Articles from non-indexed journals.
- Experimental studies in animals.
- Secondary studies such as editorials, commentaries and books.
- Articles that are not in Spanish, English and Portuguese.

## Search strategy

This research is carried out through a literature search in electronic scientific databases such as PubMed, VHL, Redalyc, Science Direct, Cochrane. The search strategy was using specific MESH terms and manual keywords as follows: (UPDATE) AND (MANAGEMENT) OR (USE) AND (TREATMENT) AND (CROHN'S DISEASE) OR (INFLAMMATORY BOWEL DESEASE).

#### Data Extraction

After the initial search, 822 studies were located, in which 781 articles that were not relevant to the objective of this review were excluded after reviewing the abstract, so we worked with 41 selected articles. (Figure 1)

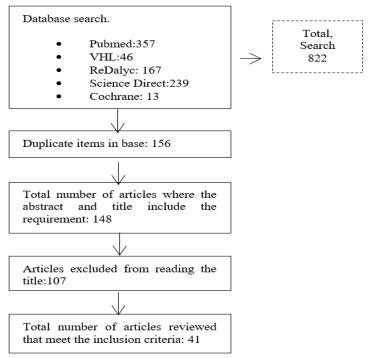


Fig. 1. Data Extraction
Author: Camila Córdova Salazar

#### Data analysis

The information analyzed was structured in two subsections: one dedicated to the management of the disease and the other dedicated to the treatment of the disease.

## **DEVELOPMENT**

## **Epidemiology**

The prevalence of CD has an incidence of 3 to 20 cases per 100,000 and is more common in developed countries than in developing countries, and in urban areas where this pathology has been steadily increasing in most regions of the world (14,15)

A higher prevalence has been observed in males than in females and manifests itself with two peaks of incidence, one between 15 and 30 years of age and the second between 50 and 70 years of age. Similarly, a trend of later diagnosis has been observed in men than in women (10,16)

## **Aetiology**

The causes of CD are multifactorial as they are not precisely known, however, in recent years there have been notable advances in the understanding of its pathophysiology. Thus, it has been shown that it is the result of the interaction between genetic susceptibility, environmental factors, and intestinal microflora, which results in an abnormal mucosal immune response resulting in epithelial compromise of intestinal barrier function (17,18)

Consequently, CD is generated in patients who have dysregulated innate and adaptive immune responses to an altered gut microbiota and who have a genetic predisposition or susceptibility to the aforementioned pathology (3).

# **Physiopathology**

Crohn's disease begins with inflammation and the formation of abscesses in the crypts, i.e. in the intestinal wall itself, which progress to the appearance of small, localized aphthoid ulcers. These mucosal lesions can develop into deep ulcers, both longitudinal and transverse, with the mucosa inflamed in between, resulting in the characteristic "cobblestone" appearance in the intestine (12).

# **Montreal Standings**

A classification proposed by the World Gastroenterology Organization in 2005, it is used to categorize the different types of inflammatory bowel diseases, dividing them into subtypes according to their location, behavior, and clinical characteristics (Table 1).

**Table 1:** Montreal Classification (2).

Age at Diagnosis (A)	Location (L)	Behavior (B)
A1: Under 16 years old	L1: Ileum	<b>B1:</b> Non-stenosing, non-
		penetrating (inflammatory)
A2: Between 17 and 40 years old	L2: Colon	<b>B2:</b> Stenosing
A3: Over 40 years old	L3: Ileum and colon	<b>B3:</b> Penetrating (fistulizing)
	<b>L4:</b> Isolated Upper Digestive	P: Perineal Disease

**Source:** Encalada F, Lemos R, López M. Crohn's disease. Mastery of the Sciences. 2017; 3:246-58. **Author:** Camila Córdova Salazar

# Classification of the severity of Crohn's disease

This classification is based on the patient's tolerance to diagnosis and complications (19).

#### Mild to moderate disease

Patients who are treated on an outpatient basis, are able to consume food orally and do not exhibit signs of toxicity, pain to the touch, mass formation or blockages (19).

## Moderate to severe disease

Individuals who do not have fistulas or abscesses but experience significant pain, fever or vomiting, pain to the touch, or those who have not responded to treatment of the disease in its mild form (19).

## **Clinical Manifestations**

The clinical manifestations will depend on the stage and severity of the disease, however, as a general way they can be classified into digestive and extradigestive:

# 1.Digestive

**Diarrhea:** 4-6 weeks of evolution, may be accompanied by abdominal discomfort prior to defecation and rectal urgency (3).

**Abdominal pain:** Diverse location and characteristics, which complicates its differential diagnosis (3).

**Weight loss:** Due to malabsorption of nutrients and other symptoms such as anorexia, nausea, vomiting that contribute to weight loss (14).

**Fever:** If it is persistent or spikes, it will be necessary to rule out infectious complications such as abscesses (20).

**Fatigue:** This may be secondary to the high prevalence of depression and anxiety reported by patients with CD (20).

**Rectal bleeding:** Ulcerations that occur in the mucosa of the colon or ileum (21).

# 2. Extradigestive

**Articular:** Type 1 and Type 2 peripheral arthritis, axial arthritis, arthralgias, enthesitis, tendonitis, periostitis, hypertrophic osteopathy and articular granulomatous lesions may manifest (14).

**Dermatological:** It has been observed that certain patients with Crohn's disease may present with pyoderma gangrenosum, erythema nodosum, Sweet's syndrome (3).

**Oral:** Aphthous stomatitis has also been seen in certain cases, however, it is not common (14).

**Ocular:** Patients with this pathology have been observed to present ocular symptoms such as episcleritis, scleritis, and uveitis (20).

# **Diagnosis**

Diagnosis should mainly be made through an exhaustive medical history, looking for risk factors, personal and family history, habits, allergies or intolerances, recent symptoms, and physical examination in combination with laboratory imaging and histological examinations (22).

## 1. Laboratory Tests

**Blood tests:** Examine for irregularities such as a decrease in the number of red blood cells leading to anemia or an increase in the white blood cell count indicating signs of inflammation or infection. It is also possible to identify deficiencies in vitamins or minerals that indicate possible nutritional problems due to impaired nutrient absorption (2).

**Stool analysis:** Through this examination, it is possible to rule out an intestinal infection and identify the existence of calprotectin in the intestinal mucosa, this is the most researched and reliable fecal marker to date in its possible role in the management of inflammatory disease (11).

**C-reactive protein test:** It is used in combination with other tests and plays a key role in monitoring CRP levels, as well as serving as a reliable indicator of the presence and activity of inflammatory diseases (23).

# 2. Imaging

**Computed tomography (CT):** It allows the visualization of the intestine and possible abnormalities in a clear way, as well as allows us to visualize the extent of inflammation (24).

**Magnetic resonance imaging:** Facilitates the diagnostic process by capturing images of the body, which makes it possible to observe if there is any section of the gastrointestinal tract affected and to analyze active inflammation or the existence of complications such as abscesses or fistulas (24,25)

**Intestinal ultrasound:** The digestive system is examined for the presence of inflammation or complications such as fistulas, abscesses, or strictures. Compared to previous techniques, one of its advantages is its greater accessibility, the absence of radiation and the lack of need to prepare the bowel (26).

Other imaging approaches are under development or evaluation for feasibility in everyday clinical practice. These include elastography, motility assessment, detection of inflammatory activity through diffusion, and the application of artificial intelligence in radiomics associated with magnetic resonance imaging (21).

## 3.Procedures

- Colonoscopy: It is useful to obtain tissue fragments (biopsies) that will be useful in the diagnostic process, in the same way it allows the visualization of the intestinal mucosa, in this type of patients discontinuous areas of inflammation characterized by signs of ulceration, erythema, mucosal edema or even luminal narrowing can be visualized (2,27)
- **Chromoendoscopy:** It is a process that is carried out during colonoscopy, in which staining the mucosa allows the identification of lesions in the walls of the intestine. This is the methodology used to monitor the risk of colon cancer in individuals with inflammatory bowel disease, since this procedure can visualize lesions that have not been identified during routine endoscopy (28).
- Capsule endoscopy: This is a technique in which the patient digests a capsule that has the ability to capture images throughout the digestive tract, through which it is possible to determine the extent of the disease and clarify situations in which there is uncertainty about the diagnosis, however, this method does not allow the taking of a biopsy for histological evaluation (29).

## **Treatment**

Although the overall purpose of treatment is to manage inflammation, it is extremely challenging to define a single therapeutic goal. This is due to the extremely complex nature of this condition in terms of how it manifests. Unlike other diseases, there is no simple indicator that measures inflammatory burden. In addition, in some cases, therapeutic goals may vary or modify depending on the particular course of the disease, the response to medications, the age of the patient, or the concomitant medical conditions (20).

When selecting a therapeutic approach, it is critical to consider not only the severity of the disease, but also its extent and location, as well as the underlying phenotype. Since the patient's symptoms do not always correlate precisely with active intestinal inflammation, it is prudent to objectively assess disease activity before making substantial changes to the treatment plan (20).

#### 1. Nutritional

Patients suffering from this condition should be cautious when it comes to their diet, avoiding excessive fiber consumption in order to prevent intestinal blockages and reducing fat and dairy intake. In certain circumstances, it may be advisable to use balanced enteral or parenteral nutrition, which is especially implemented in severe cases of the disease (10,30).

Oral administration of omega-3 is recommended, as it has the ability to slow down the production of prostaglandins and leukotrienes, leading to a decrease in inflammation. In addition, the incorporation of antioxidants, vitamin E and selenium has been used as supplements, demonstrating their ability to reduce lesions in the colon and can be used as a complement to the treatment plan (31,32)

# 2. Pharmacological

**Aminosalicylates:** Aminosalicylates (Sulfasalazine or Mesalazine) (Table 2) are a group of drugs that include 5-aminosalicylic acid in their molecular composition. Despite its wide use, especially in individuals with mild Crohn's disease, its use is not recommended because its efficacy in inducing remission shows the lack of benefit of salicylates compared to placebo (3,20)

**Corticosteroids:** Corticosteroids such as prednisone, prednisolone, and budesonide (Table 2) are prescribed as the main treatment to initiate remission in patients with active Crohn's disease. However, due to the various adverse effects they entail and their limited long-term efficacy, their use is not recommended for the maintenance of treatment (3). Locally-acting synthetic corticosteroids are appropriate for achieving remission in cases of ileal, ileocolic or right-wing colonic Crohn's disease when the disease is at a mild to moderate active stage. On the other hand, systemic corticosteroids are used in the most pronounced or severe episodes of the disease (14,20).

**Antibiotics: Antibiotics** are ineffective in establishing and sustaining remission in Crohn's disease, generally the most commonly used in guidelines are metronidazole or ciprofloxacin. Therefore, its use should be restricted to addressing situations such as complex perianal disease, infectious complications, and bacterial overgrowth in the small intestine (3,20).

**Immunomodulators:** Their main function is to inhibit the immune response of the disease and lies in their application as maintenance therapy, due to their gradual action effect, however, they are more effective if combined with biological therapy. These compounds prevent relapse in approximately fifty percent of patients (Table 2) (10,30).

**Thiopurines**: Thiopurines such as azathioprine and mercaptopurine are used to maintain remission. However, they do not generate results immediately, as their response can take between 6 and 12 weeks. It is also important to note that the use of thiopurines is restricted by their side effect profile, so it is essential to evaluate certain factors before prescribing them (20,33).

**Methotrexate**: This drug is used for both induction of remission and maintenance of remission, like its predecessor, it also shows a side effect profile, so the patient should be followed up to evaluate the discontinuation of the drug in case it occurs (14,20).

# 3. Biological

**Anti-TNF agents:** It is currently the most effective option for treating moderate to severe Crohn's disease. It can be used alone or combined with an immunomodulator, either to establish or maintain remission. Currently, the Food and Drug Administration (FDA) has approved three anti-TNF agents: infliximab, adalimumab, and certolizumab pegol (Table 2). These share a similar safety profile, so the choice of drug depends on the treating patient (14,34)

**Selective adhesion molecule inhibitors:** Vedolizumab is the first selective adhesion molecule inhibitor directed at the gut, used in cases of moderate to severe Crohn's disease. It is used to induce remission, although its effect is gradually manifested and its effectiveness is limited. However, patients who respond well to therapy will retain that remission after one year. An initial reaction is usually seen during the first 12 weeks after starting treatment. In addition, since vedolizumab is designed specifically for the gut, it does not pose a risk of serious adverse events (14,35).

**Interleukin inhibitor:** Ustekinumab is the newest drug approved for the treatment of moderate to severe Crohn's disease. It is administered through a single weight-based infusion, followed by subcutaneous injections every 8 weeks. Overall, its effectiveness appears to be comparable to anti-TNF therapy for both induction of remission and maintenance of remission, with results typically manifesting within approximately 6 weeks (14,36)

# 4. Surgical

During the course of the disease, most individuals will likely require surgical intervention. The specific surgical procedure to be performed is based on the underlying reason motivating the surgery.

**Stenosing Crohn's disease:** This intervention is recommended for patients with persistent symptoms of bowel obstruction, the purpose of which is to remove the smallest portion of viable bowel and perform a primary anastomosis. If multiple narrowings occur, it may not be feasible to eliminate them entirely (14,37)

**Fistulant Crohn's disease:** It is recommended in situations where enteroenteric fistulas are present, unless the fistula is not causing an immediate complication. In cases of enterovesicular fistulas, enterovaginal fistulas, or enterocutaneous fistulas, intestinal resection and fistulotomy are often necessary (14).

**Perianal Crohn's disease:** Both perianal abscess and fistula often need to be addressed through surgery to perform drainage and line placement. fissures are typically treated with medical therapy for this disease, but if they do not respond to this approach, a physiurotomy or, in some situations, botulinum toxin injections might be considered (14,38)

## 5. Novel Therapies

**Apheresis:** Apheresis therapy is an innovative treatment option for Crohn's disease whose primary focus is to decrease the inflammatory response in the affected area by selectively isolating and absorbing one or more types of leukocytes. However, there is a lack of evidence on the efficacy of maintenance therapy and further research is required to draw more robust conclusions (31).

**Fetal Microbiota Transplantation (FMT):** This is an innovative therapy that involves transplanting the functional fecal microbiota of healthy donors into the gastrointestinal system of patients with imbalances in their gut microbiome, in order to restore microbial health and treat disease. Although long-term outcomes are still unclear, it is important to focus on donor-recipient concordance based on analysis of microbial composition, choice of routes of administration, and determination of the most appropriate therapeutic approach (31,39,40)

**Probiotics, prebiotics, synbiotics, and probiotics:** These are favorable in the treatment of Crohn's disease, particularly when used in combination. Group-specific analysis demonstrated that synbiotics may offer greater effectiveness compared to probiotics or prebiotics in inducing or maintaining disease remission. In addition, combining probiotics, prebiotics, or synbiotics with conventional medications was shown to be more effective than using conventional medications alone (31,41)

**Stem cell transplantation: Stem cell transplantation** has the ability to stimulate the recovery of damaged tissue and contribute to the recovery of particular tissue functions, which in turn may contribute to the repair of the integrity of the intestinal mucosal barrier in individuals with inflammatory bowel disease (31).

**Hematopoietic stem cell transplantation (HSC):** HSCs have the ability to travel to damaged tissues and promote their renewal and regeneration. The main sources of these cells for therapeutic purposes are bone marrow, umbilical cord, and peripheral blood, with the most specific cell surface marker being glycoprotein. However, caution is important due to the elevated risk of adverse events following the procedure (31).

**Table 2:** Main treatments for Crohn's disease

	TREATMENT	FUNCTION	USE
SALICYLATES	Sulfasalazine Mesalazine	Anti-inflammatories with a local effect on the intestinal mucosa	Only in case of LEVE of CD
CORTICOSTEROID	Prednisone Prednisolone Budesonide	Powerful anti-inflammatory effect	In the outbreak for limited periods and never to maintain remission
BIOLOGICA IMMUNOMODULAT	Thiopurines Methotrexate Tracolimus Myophenolate	Inhibit the immune response altered by the disease	For Maintenance of Remission
BIOLOGICA	Adalimumab Infliximab	Selectively modify the immune system: They act against TNF	To induce remission and keep the disease inactive

Source: Cai Z, Wang S, Li J. Treatment of Inflammatory Bowel Disease: A Comprehensive

Review. Front Med. 2021;8. **Author:** Camila Córdova Salazar

#### **RESULTS**

After a thorough literature review, important results have been obtained that highlight several key aspects in relation to Crohn's disease. The primary symptoms, consisting of episodic diarrhea, weight loss, and abdominal pain, are hallmarks of this inflammatory bowel condition. In addition, relevant complications have been identified, including the presence of abdominal abscesses and enterocutaneous fistulas.

In the field of treatment, there is significant variability based on determinants such as disease severity, patient risk stratification, and personal preferences. Clinical factors, such as the age at onset of the disease and the existence of pervasive complications, are also considered. A crucial aspect to note is that most patients experience cycles of relapses and remissions, which demands lifelong follow-up. In the treatment of the disease in cases of mild to moderate intensity, it is recommended to use 5-aminosalicylic acid or antibiotics such as metronidazole, ciprofloxacin and rifaximin. On the other hand, for more severe cases, corticosteroids are used and, sometimes, immunomodulators such as azathioprine, or biological agents such as infliximab, vedolizumab and ustekinumab.

A fact to take into consideration is that, approximately, 70% of patients end up needing surgery, this measure is mostly adopted in cases of recurrent intestinal obstruction, refractory fistulas or persistent abscesses. An aspect that deserves special attention is the impact on the mental health of patients, depression and severe anxiety are common problems in these cases, so continuous advice from a psychologist is recommended to provide the necessary support.

Finally, Crohn's disease is a complex and multifaceted condition that demands a comprehensive and personalized approach to its treatment, so the results of this literature review provide a broad overview of its clinical manifestations, therapeutic approaches, and important considerations for the well-being of affected patients.

#### DISCUSSION

Crohn's disease is a pathology that has a multifactorial etiology that in certain studies has been considered an idiopathic disease, however, Silva et al., in a review carried out in 2019, evidenced the close relationship between the pathophysiology of the disease and the genetic involvement of individuals, concluding that through genetic profiles a personalized and specific therapy can be offered for each patient (6). Likewise, Tregón, et al. mentions that CD has an etiology that is still under constant study, however, it manifests itself in individuals who have a genetic predisposition, especially a mutation in the NOD2/CARD15 gene, but that increases its probability of occurrence together with environmental factors (3).

In relation to the age group affected by this pathology, there are several statements, in a review carried out in 2022 by Gonzales et al., it is evident that Crohn's disease is more frequent in patients between 15 and 30 years of age, regardless of sex (1). However, in an observational study conducted at the Guillermo Almenara Irigoyen National Hospital in Peru in 2020 by Paredes et al., it was shown that the mean age of patients affected by this pathology ranges from 48 to 62 years old, with a predominance in males (8).

Currently, the therapeutic approach mainly encompasses pharmacological, surgical, and nutritional strategies, Cushing et al. in 2021 through a review concluded that the optimal approach will depend on risk stratification, patient age, and the presence of complications, however, they mention that 50% of patients will end up in surgical treatment. (28). As research progresses, and especially in the last two decades, new therapeutic alternatives have been presented that have been shown to reduce surgery rates, associated with the early and adequate implementation of medical therapies, however, Kumar, et al. in 2022 through a literature review shows that despite the use of biological therapy there is a high rate of surgery and postoperative recurrence (7,38).

Multiple reviews have shown that the effectiveness and treatment of Crohn's disease is carried out through the patient's clinical symptoms, however, Zhaobei et al. in 2021 mention that there are methods such as endoscopy, histology, radiology, immunobiochemical monitoring biomarkers, quality of life assessment, and other methods that provide more valuable references for the evaluation of disease activity (11, (17)

When it comes to making a decision towards personalized and precise therapy, there are a variety of options, but at the same time they can be considered as challenges. Therefore, health professionals must carefully analyze the indications, contraindications, adverse effects, evidence-based medicine of the treatments and drugs used, so that in this way a personalized treatment can be developed based on the comprehensive evaluation of the patient, so the treatment must be flexible and change according to the patient's response Timely communication and close cooperation between doctors and patients They are equally essential for effective treatment strategies.

#### **CONCLUSION**

Crohn's disease is characterized as a chronic, relapsing, inflammatory disease that can affect the entire digestive tract and whose etiology is not precisely known. The complexity of their disease can result in lasting physical, emotional, and psychological effects on patients. This condition constitutes a public health challenge due to its prolonged nature with recurrent episodes, impacting the patient's quality of life, therefore, it is essential to adopt a multidisciplinary approach with specialists and combine characteristic findings.

In recent decades, the medical compendium for the treatment of CD has been increasing, and various therapeutic alternatives are available, including monoclonal antibody therapies, immunomodulators, and surgery. In such a way, the therapeutic decisions made must be adapted to each patient, so that, finally, the choice of the appropriate treatment is based on multiple factors such as the demographics of the individual, the severity of the disease and the existence of complications. In this context, doctors need to be up-to-date and familiar with each therapy in order to provide optimal advice to their patients. It is also essential to mention the importance of educating patients about their chronic disease and making them aware of the possible long-term consequences that it entails in order to strengthen the doctor-patient relationship, which has been seen to be crucial to avoid complications and remissions in this type of patient.

## RECOMMENDATIONS

- It is recommended to classify each patient according to the clinical characteristics they present and, based on their medical history, make decisions for their management and pharmacological treatment.
- Every patient with Crohn's disease should be informed that Crohn's disease is a chronic condition that has no cure and that persistent and permanent treatment is needed.
- It is important that patients with this pathology are treated by specialists in psychology since it is a chronic disease that alters their daily routine and this can even affect personal and work relationships due to frustration in periods of remissions and relapses.

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