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Ulcerous Colitis in Mexico: Is It Still a Diagnostic-Therapeutic Myth? 20 Years of Experience

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ABSTRACT

Nonspecific chronic ulcerative colitis is a variety of inflammatory bowel diseases which to date is of unknown etiology. The objective is to present the experience of 20 years in the diagnosis and treatment, in a multicenter study of nonspecific chronic ulcerative colitis in Mexico. With a study methodology with a retrospective, longitudinal, observational and descriptive design, in the Colon and Rectal Surgery and General Surgery services. Results: 181 patients with histopathologically confirmed diagnosis: 76 women (42%) and 105 men (58%). With an age range of 16 to 85 years, with a mean of 39 years, with a follow-up of 1 to 5 years from diagnosis, both clinically and colonoscopically; 63 cases (36) required surgery, 10 patients with colorectal cancer (2%): severe dysplasia and/or tumor (neoplasia), anal surgery reaches up to 25%. The statistical or epidemiological data of non-specific chronic ulcerative colitis to date are unknown or not very relevant to the public or private Health System in Mexico and/or in most of the world, with unreliable information, without scientific validation and only by the experience of some physicians with little unpublished casuistry.

INTRODUCTION

The pathological entity called Nonspecific Chronic Ulcerative Colitis (UC) in terms of its etiology is still unknown, its incidence and prevalence are as variable as it is uncertain and in Mexico it is completely ignored; It is an inflammatory bowel disease (IBD) that is characterized by ulcers in the mucosa of the colon and rectum, unlike Crohn's disease (CD) that involves all histological layers. [1] UC was first described in 640 BC by Aretaeus and Soranus, but it was not until 1859 that Samuel Wilks called it ulcerative colitis for the first time. Soon after, it was detailed

clinically and pathologically by Wilks and Moxon (1875), Allchin (1885) and Hale-White (1888), in contrast to other diseases affecting the colon and rectum. [2, 3]

OBJECTIVE

To present the experience of 20 years in the diagnosis and treatment, in a multicenter study of UC in Mexico.

MATERIAL AND METHODS

It is a study with a retrospective, longitudinal, observational and descriptive design. In the Colon and Rectal Surgery services, as well as General Surgery of the second and third level of health care, in six hospitals in Mexico City and the State of Mexico.

- High Specialty Medical Unit Hospital National Medical Center for Infectious Diseases. "Dr. Daniel Méndez Hernández" from the Mexican Social Security Institute. Mexico City. Country: Mexico. 3rd Level.
- Specialty Hospital of Mexico City "Dr. Belisario Domínguez" of the Ministry of Health. Mexico City. Country: Mexico. 3rd level
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- General Hospital "Las Américas" of Ecatepec. Institute of Health of the State of Mexico. Municipality of Ecatepec de Morelos State of Mexico. Country: Mexico. 2nd Level.

In a study period that spanned from February 2003 to February 2023. The following were evaluated: age, sex, clinical picture, location of anatomical activity, lines of treatment or medical treatment behaviors with or without surgical intervention, colon and rectal as well as anal, morbidity and mortality. In addition, an analysis of the research of the national and international medical literature on what is described in the ICUC is carried out.

RESULTS

The records of patients classified exclusively as **UC**, who meet the criteria for histopathological diagnostic confirmation, were reviewed; with a total of 181 patients: 76 women (42%) and 105 men (58%). With an age range of 16 to 85 years, with an average of 39 years.

Patients who had a follow-up of 1 to 5 years from diagnosis, both clinically and colonoscopically, were included in this study. Colonoscopy follow-up is performed annually with strict colonic mapping with biopsies every 10 cm from the rectum to the cecum and basic or general laboratories. The anatomical segments affected by the disease are classified as: rectum, rectum and sigmoid, rectum-sigmoid and descending colon, rectum-descending-sigmoid and transverse, and finally, rectum with all the rest of the colon (pancolonic). See table. 1.

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Table 1: Involvement and Anatomical Extension of UC in Number and Percentage.

Condition Anatomical	Number	%
Rectum	78	43
Sigmoid	20	11
Descending Colon	35	19
Transverse	12	7
Pancolonic	36	20
Total	181	100

The authors specified the following terms in the treatment of UC in this group of patients in this study:

Foreground

- All patients began monotherapy with oral mesalazine (Salofalk) at the maximum dose, in a dosage of 4-3-4 tablets per day every 8 hours orally of 500 mg each, 5 g in total in 24 hours and 250 mg suppositories 2 every 12 hours, rectally. In a response time of 3 months and with three-weekly decreases in the oral route of a tablet from the second month, until finding the optimal dose in each patient. At the same time, the suppositories are decreased bimonthly to a minimum dose of 250 mg per day without stopping and at night. With laboratory follow-up quarterly the first year and thereafter semi-annually. As well as, annual colonoscopy with colonic mapping.
- Strict dairy-free diet: restricting foods such as milk, cheese, cream, yogurt, or foods prepared with these products, cookies, chocolates, jellies, champurrados, flans, among others.
- An intuitive, imperative, and insistent talk is carried out, making the patient aware of the essentials of discipline, adherence to the dosage and the monotherapy of UC treatment. Fundamental point for an excellent response to treatment and prognosis of the patient.
- The fact of using the patent medicine is a guarantee in the adequate evolution of the patient; generic medicines have not guaranteed their therapeutic effect according to the experience of the authors of this work.
- Evacuating enemas with mesalazine or equivalent are not considered effective by the authors of this investigation, because:
    1. It is evident that the patient requires training that he does not have for its application.
    2. Due to the obvious rectal-anal anatomical and physiological alterations that these patients suffer permanently, in rectal capacitance and in lack of control of the disease with continuous and incoercible pushing and tenesmus; It explains a vicious circle of no contact of the drug and/or little time with the rectal mucosa, when its objective is to be a topical therapy. And it evokes false failure and unnecessary cost.

Second Term

Patients who do not respond to 5-ASA, bimodal therapy was added, adding steroids in outpatient management where oral prednisone is the drug of choice at 1 mg/kg of weight initially and decreasing for the first time in one month, divided into two doses every 12 hours orally, in combination with omeprazole 20 mg every 12 hours in individuals who do not have a

history of dyspepsia and omeprazole 40 mg every 12 hours in those who do (avoiding confusion with symptoms digestive system of another etiology, in this case of colorectal origin) that many doctors overlook. Subsequently, the steroid was decreased fortnightly until its complete withdrawal in the responding patient and only continued with the monotherapy (5-ASA) in reduction until its particular remission dose. Corroborated by clinic, endoscopy and histopathology.

Third term

Critically ill patients with fulminant UC, after upper endoscopy and colonoscopy, referred from other hospitals or non-responders at the second term, who require hospitalization and start aggressive therapy:

- Fasting (intestinal rest) from 5 to 10 days or more depending on the case.
- Aggressive intravenous hydroelectrolytic therapy.
- Special total parenteral nutrition and even mixed nutrition without residue according to each patient.
- Blood transfusion until reaching 12 g of hemoglobin, as well as fresh frozen plasma interspersed prudently, combined with phytomenadione at the maximum dose.
- Antibiotherapy with metronidazole and an antimicrobial agent against gram-negative agents.
- And what is essential is the initiation and continuity of intravenous steroids, at a loading dose (500 mg of methylprednisolone) and subsequent use of pulse therapy (100 mg intravenously every 6 hours) in 3 to 5 days and subsequent reduction dose. Every 8 hours, then every 12 hours, until substitution of the oral steroid and outpatient management, returning to the second term and thus to the first.

Fourth Term

The use of biological therapy focusing on anti-TNF drugs (infliximab), the only drug that was available in only one health institution (IMSS) and in the private sector, at a known dosage, was not applicable by the authors.

Fifth Term

Surgical Treatment

- Restorative proctocolectomy with ileoanal J-pouch. Due to high-grade dysplasia, and refractoriness to medical treatment that endangers the patient's life.
- Creation of a temporary colon and/or small intestine stoma. Accompanied by proctocolectomy.
- The use of the Turnbull-Blowhole technique.
- Colectomy of the segment affected by stenosis and/or perforation, or cancer.
- Surgical drainage of anal and perirectal abscesses.
- Anal fistulectomies, with sphincteric reconstruction.
- Fissurectomies with open internal lateral sphincterotomy.

Response to Treatment:

The response to the 5 terms already described was evaluated after clinical, endoscopic and histological evaluation.

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The clinical evaluation was assessed with an innovative system created by the authors of this work, in Ambulatory (A) and Hospitalized (H).

Ambulatory (A):

- Bidding and tenesmus: 1 point
- Alterations in the act of evacuation diarrhea/constipation: 1 point
- Mild, moderate to severe abdominal pain: 1 to 3 points
- Asthenia and adinamia: 1 to 2 points
- Any type of anemia: 1 point
- Any type/degree of malnutrition: 1 point
- Bleeding type hematochezia or rectal bleeding of non-anal origin: 1 point
- Extraintestinal manifestations, any : 1 point
- The total is 10 points maximum and 0 minimum.

Hospitalizados (H):

- State of septic and/or hypovolemic shock 1 degree = point: 1 to 4 points
- Systemic inflammatory response: 1 point

The total is 5 points maximum and 0 minimum.

With regard to endoscopic evaluation, the Baron classification is used. See table 2.

Table 2: Clinical Evaluation and Endoscopic Evaluation Without Treatment (Nt) and at 6 Months or A Year, As A Responder to Treatment (Rt).

NO. PATIENT (ST)	BARON **%**	AMBULATORY	HOSPITALIZED	NO. PATIENT (RT)	%
10	I (5.63)	10 p 5-7	0	135	74.64
76	II (42.25)	76 p 3-8	0	30	16.90
59	III (32.39)	59 p 6-7	0	13	7.04
36	IV (19.73)	25 p 8-10	11 p 1-4	3	1.42
TOTAL: 181	100	170	11	178	100

The majority of patients responding to medical treatment was much higher than expected, since improvement and control of **UC** was achieved in almost 91.54% of the total group under study with the first line of management or in the first term of treatment outline of this research. The rest of the patients 7.04% where the second term of management (steroid combined with 5-ASA) was established, with an adequate response. And 1.42%, after the exhaustion of the first three lines of management/therapeutic terms, and that due to lack of resources in public hospitals of not having biologicals because they are high-cost drugs (fourth term) the last option is projected of treatment, which is surgery.

16 patients were referred to the Specialty Hospital of Mexico City “Dr. Belisario Domínguez” in very symptomatic conditions and some even in critical conditions (due to the fact that “the sick” do not have their own financial resources to pay for their care): 11 patients were classified with Baron IV p 1-4, and 5 Baron III patients p-6-7.

Lastly, 9 restorative proctocolectomies and one with a temporary stoma (ileostomy) were performed in a single surgical procedure, which was later performed as an ileonal J-reservoir due to toxic colon. 5 of them were due to severe dysplasia and colorectal cancer, 2 due to refractoriness to medical management. There were 3 cases of toxic colon, two responded to Turnbull-Blowhole surgical management. The surgeries performed are described in **Table 3.**

Tabla 3: Surgery Performed in Patients With UC

Surgery Performed	NUMBER	%
Proctocolectomy Restorer	9	5
Proctolectomy with Stoma-Ileostomy	1	1
Fistulectomy with Sphincter Plasty	8	5
Turnbull-Blowhole	3	2
Fissurectomy with Lateral Sphincterotomy	31	17
Abscess Drainage Anal	6	3
Partial Colectomy with Anastomoses	3	2
Partial Colectomy with Temporary Stoma	2	1
Total	63	36

Of this group of patients who required surgery there were 63, which represent 36%, 10 patients presented colorectal cancer in severe dysplasia and/or tumor (neoplasia) that do not exceed 2% of this investigation. Surgical treatment focused on anal pathology reaches up to 25% of patients in 45 cases. The reported mortality is less than 1%, since there was only one death due to refusing a blood transfusion for religious reasons, as well as intensive medical-surgical management.

DISCUSSION

The statistical or epidemiological data of the UC to date are unknown or not very relevant to the public or private Health System in Mexico and/or in most of the world, with unreliable information, without scientific validation and only due to the experience of a few patients. [4] In what corresponds to its etiology, the origin of this disease has been sought, in food, not evidencing any significant association, [5] for which a genetic predisposition, environmental factors and the altered immune response to the gut microbiota. [6] The clinical picture is nonspecific and variable, which can be divided into:

- Local
- Extra intestinal
- Systemic

In the local symptoms and signs, the patients present with intermittent colicky abdominal pain to a non-specific dull pain, of mild to moderate intensity and predominantly in the left colic framework in a progressive and recurrent manner, abdominal distension, intermittent diarrhea combined with constipation, straining, tenesmus, rectal bleeding or hematochezia. In the extra-intestinal clinical picture with a very low incidence, there is jaundice (sclerosing cholangitis), sporadic myositis, episodic arthritis, erythema nodosum, episcleritis, pyoderma gangrenosum, sacroilitis and uveitis. With regard to the systemic, the most frequent is anemic syndrome, weight loss, moderate to severe chronic malnutrition, wasting syndrome, asthenia, adynamia, with attack on the general state, among others. [7, 8, 9] The complications of UC are diverse and multiple, including intestinal perforation with acute abdomen and abdominal sepsis, toxic

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megacolon, primary sclerosing cholangitis, fulminant colitis, hypovolemic shock secondary to severe dehydration and/or hemorrhage. , severe dysplasia and/or colorectal cancer. [10, 11] The diagnosis of UC is actually very exquisite, scrupulous and specific. In the world medical literature there is such a variety of concepts that it is very difficult to discern and combine the specification towards an objective medical criterion or scenario that leads to correct conduct. and beneficial for the patient, an example of this is the implementation of intestinal ultrasound as a predictor of severity (when it is an operator-dependent study, impossible to visualize through the air and not very specific in any type of intestinal loop, however, this published and there is no lack of someone who will make it transcendent in the long run) in inflammatory bowel disease. [12] Or the diagnostic criteria of Lennard-Jones J.E., which forced the team of authors of this work to carry out a search in the medical literature trying to find scientific support for it, where clinical, radiological and anatomopathological criteria are mentioned, inclusion criteria and many more, [13] with information so varied, distorted, deviant and/or without scientific support, and that is far from the original manuscripts, with the concepts of the last century, with more than 60 years and with rickety scenarios and/ or technological resources in more very, very decimated comparatively to the current. [14, 15, 16] In the same way, the follow-up mentions the Truelove and Witts severity index, which has its origins, like the previous one, in the fifties (1954) of the previous century, revealing its ambiguity or its obsolescence, however, for some clinicians and in the so-called clinical practice guidelines, unfortunately they are an icon of current medicine for the diagnostic-therapeutic regulations of UC. [17, 18] Without having the scientific and correct parameters for its validation of the "Lennard-Jones diagnostic criteria and Truelove and Witts severity index", in the same way the level of recommendation and evidence according to the Oxford classification, is D and 5, the latter or the least recommendable and with little scientific support, focusing on subjective consensus and not on the objective of full scientific validation; [16, 19, 20, 21] and furthermore, “previous scales have not been formally validated”. [20]

There is the fact that it has taken on overwhelming relevance in recent years, (with an infinity of fatuous information, multiple consensuses by self-appointed experts and very subjective clinical or endoscopic diagnostic ease, issuing verdicts of overdiagnosis) Is it for medical interest- ethical? Or is it really just an economic-political convenience? [22, 23] It is therefore essential to correlate the clinical picture of UC with the pathophysiology exclusively, to such a degree of achieving their understanding and thus explaining their behavior to the doctor and to the patient himself in terms of signs or symptoms make the following observations:

First Observation

- UC always affects the rectum, if it is not involved, the patient does not comply with the diagnosis of UC. It may extend continuously to the sigmoid colon, the descending colon, the transverse colon, or involve the entire colon. [13,24]
- Damage to the rectal mucosa with the consequent fibrous scarring and ischemia of the submucosa, in a cyclical and permanent way, combine in a condition in its physiology or its functioning, which is due to its chronicity and is practically irreversible. [13, 24]
- The functions of the rectum as a competently muscular organ (handles resting pressures of 80 mm Hg to a pressure of maximum voluntary contraction of 221 mm Hg), tubular, valvular and richly innervated, achieving a slow, regulated and coordinating capacitance or storage the muscle groups that make it up, by the act of defecation, with the final product of the expulsion of fecal matter and/or its continence. [25, 26]

- The first sensation of the desire to defecate occurs at the amount of 18 ± 8 ml; 111 ± 56 and maximum volume tolerated 188 ± 53 ml. Other groups get first sensation with 20-40 ml, urgency sensation with 80-200 ml, and peak sensation with 110-480 ml. [25, 26]
- In peristalsis in the rectum that receives the segmental or austral contractions of the sigmoid colon, combining pendular displacements (antiperistaltic) and culminating in massive, propulsive contractions or mass movements. [25, 26]

Second Observation

- With the previous observation, the condition in the rectum and the anus makes a pathognomonic clinical picture of patients suffering from UC and the doctor who treats this disease should be made aware (which only some specialist colon and rectal surgeons have assimilated), explaining in detail to the patient that the symptoms of pushing and tenesmus, he can reduce and control them (obviously with adequate treatment, adherence and persistence). This makes it possible to destroy the vicious circle of constant trauma to the anorect. [27]
- The constant trauma to the anorectum, forcing evacuation due to the intense and frequent straining of the patient with UC, coupled with tenesmus due to the condition of the already damaged anatomy and the brutally altered physiology of these organs (anus, anal canal and rectum). By not breaking this vicious circle, the patient is a victim of diseases not typical of UC, such as acute or chronic anal fissures, anal abscesses, anorectal fistulas, anal abrasions, and complicated hemorrhoidal pathology; stigmatized or associated by many doctors called "experts" as exacerbation or relapse of the inflammatory process of UC. [28, 29]
- It is implausible to always carry out a professional proctological examination in patients with UC who manifest symptoms and signs despite good adherence to treatment. (Only the subspecialist in Colon and Rectal Surgery) has this competence. Otherwise, they will over treat the patient with steroids (due to relapse) and they will potentiate the added proctological disease or escalate the treatment, without omitting that they will leave aside the treatment of the anorectal pathology and that there will be no improvement, but rather a complication, which in the long run it would lead to therapeutic exhaustion for UC and the patient would continue with anorectal pathology; with the risk of even a poorly indicated proctocolectomy and permanent ileostomy (overtreatment), or worse, incongruently “clinically changing the diagnosis to Crohn's disease”, as has already occurred in daily medical practice. [30, 31, 32]

The very subjective diagnosis based on the clinical picture (with criteria from 1954 and 1968) or the little objective-specificity of endoscopic optics by an "expert" physician [14, 15, 16, 17, 18, 20] leaves in doubt the certainty of the diagnosis for the authors of this work, and without omitting to mention that to date, there is no specific or sensitive laboratory or cabinet study that confirms the diagnosis, [33, 34, 35] clearly any process infectious and/or inflammatory, or due to any trauma or even a simple urinary tract infection can cause elevation of these “acute phase reactants” (C-reactive protein and erythrocyte sedimentation rate); [36] on the other hand, the much mentioned protein that has granules with neutrophils in fecal matter with normal values below 50 µg/g, although any inflammatory and organic process could raise it such as polyps, bacterial/parasitic infections, celiac disease and colon cancer; Furthermore, there is no standardized optimal cut-off value either; where the sensitivity of fecal calprotectin

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to detect mucosal activity ranges from 70 to 100% with a specificity of 44 to 100% depending on the cut-off point, in conclusion, it is tacitly quite imprecise. [37, 38, 39]

Other cabinet studies such as colon enema, computerized axial tomography (except in patients with an emergency or complication) and even nuclear magnetic resonance [40, 41] do not compare to the usefulness and advantages of a colonoscopy. It is true that it is an invasive study, with a much higher risk of perforation and/or complications than upper endoscopy, intraoperative enteroscopy, or endoscopic retrograde cholangiopancreatography, which is more complex and even enteroscopy itself, however, it is more objective and direct in terms of the other resources that are currently available (laboratories and cabinets that are non-specific and indirect), which is why it is important and that it is mandatory to perform it in UC patients in a methodical, precise and continuous manner [42]: thus evaluating the endoscopic response to established treatment, performing biopsies with colonic mapping, to integrate an ethical, correct and preventive follow-up against dysplasia and colon or rectal cancer. For this reason, it is considered the gold standard for obtaining biopsies and staging the disease, on an annualized basis, [43, 44] and it is currently the only resource that is not surpassed by any other at all and is also conclusive, since it manages to obtain the determinant of the definitive histopathological report in the diagnosis, (taking biopsies for colonic mapping) and in the monitoring of the disease activity in a precise manner or early detection of colorectal cancer. [1, 20, 45]

The trend or "fashion" of medicine in recent decades is the loss of objectivity, of the scientific, of the statistically reproducible, of the tangible, of the tacit or specific, with the lowest quality of scientific evidence. level and with a vagueness to what it really is, in recent times it has been the victim of an invasion of a number of classifications, poor prognostic factors, unique clinical evaluations, laboratories and cabinets that yield biased and indirect information, which are subjective or superfluous, and that try to replace, justify or “cover the sun” with a finger; which, of course, have not been formally scientifically validated at level I of scientific evidence and, worst of all, that for years the vast majority of the galenic guild does not cause any concern about the degree of their medical care, which is of such low quality , unsustainable, vague and unscientific, since they only settle for little experience or biased expertise promoted by the pharmaceutical industry.

Only a few examples of the various classifications for the UC are listed:

1. One of the classifications that incur its spread of disease from Montreal classification disease. [46, 47]
2. Montreal classification for UC severity. [48]
3. Truelove and Witts severity index. [17, 18, 48]
4. Endoscopic Severity Index of UC. [48]
5. The Mayo Enhanced Endoscopic Score. [49]
6. External validation of the Paddington International Virtual Electronic ChromoendoScopy Score. [50]
7. The Rachmilewitz index. [51]
8. Baron's endoscopic classification. [52]
9. Comprehensive disease index (NIIE) or Yamamoto-Furusho index. [20]
10. Histological classification of the Riley scale. [20, 48]

11. Geboes histological classification is the most widely used internationally, unlike the other two partially validated, it considers eosinophils and basal plasmacytosis in the lamina propria. [53]
12. Histological classification of the Gupta index. [53, 54]
13. Histological classification the Gramlich system. [53, 55]

Once the histological diagnosis of UC is confirmed, conservative medical treatment or surgical treatment is started as each patient requires; Begin with a strict dairy-free diet and with the specific drug Mesalazine 500 mg prolonged-release granules at the maximum dose (greater than 2 g per day) as the first line of management, in combination with suppositories, liquid or foam enemas, gels, or ointments of the same chemical compound, 5-ASA. There is no better dose response to topical therapy above a 1g dose of mesalazine daily. Using the suppositories once daily is as effective as divided dose therapy. In a grotesque way, what has been used in the last 50 years is remembered: enemas of silver nitrate, potassium permanganate, cyclosporine, butyrate, nicotine or arsenic [56, 57] And in the second line of treatment, topical or taken steroids will be used such as: Budesonide, Triamcinolone, Beclomethasone Dipropionate and Hydrocortisone. [57, 58]

The use of biologics in the treatment of UC, anti-TNF drugs (Infliximab, Adalimumab, Certoluzimab Pegol, and Golimumab), anti-integrin drugs (Vedolizumab), interleukin 12 and 23 inhibitors (ustekinumab), in a third line management, but it is common for patients to respond to steroid treatment. [59] It should be mentioned that quantifying the blood levels of anti-TNF-alpha and antibodies against the biologic defines the mechanisms of loss of response, justifies optimizing the dose per se and reduces the risk of colectomy (these assertions They are only by consensus of the so-called “experts”). [60] However, there is medical literature that points out the contrary and describes that the rescue therapy with intensified doses of infliximab in severe ulcerative colitis does not reduce the rates of colectomy in the short term, but it does increase the postoperative complications. [61]

Other publications refer to the use of biologics, called small cell Tofacitinib or Vedolizumab, which achieve clinical remission in 61/166 (36.7%) and 75/166 (45.2%) patients with UC in a follow-up of 8 and 24 weeks, it has been indicated for the beginning or as the first line of management, in cases of refractoriness. [62, 63] In addition, Voclosporin has been identified as biologically effective in a preclinical model of UC and could be a possible therapeutic option in its treatment. [64] The drug Upadacitinib (a JAK kinase inhibitor) has been approved by the FDA (Food and Drug Administration) for use as a recent treatment option for UC; on the other hand, fecal microbiota transplantation has been studied as a therapeutic weapon, however, its use remains controversial due to its unknown efficacy. [65, 66] Azathioprine (Azasan, Imuran) and Mercaptopurine (Purinethol, Purixan), these are immunosuppressants, as well as Cyclosporine, which as options when combined with biologics or with 5-ASA depending on the choice of the case, represent another management resource. [19, 67]

Finally, mention is made of Mirikizumab, a humanized IL-23p19 anti-human IgG4 monoclonal antibody, being developed for the treatment of UC, being approved in March 2023 in Japan, for use as induction and maintenance therapy in patients with moderate presentation. to severe who have an inadequate response to conventional therapy or treatments and is the first inhibitor of IL-23p19. [68]

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UC is a potentially surgical disease throughout the patient's life, from its diagnostic confirmation; in the understanding of being incurable and only seeking control to grant a certain quality of life to the patient. For this reason, the use of the entire arsenal of medications mentioned above. At what point is the patient a candidate for surgery? What specialist doctor detects or identifies it and determines it? What surgical technique would be appropriate? What really motivated the use of the last resort (surgery)? Is it necessary to wait for the patient's conditions to be deplorable, before performing highly complex surgery with very potential risks of complications due to the patient's wear and tear conditions? All these questions have answers and therefore the focus of maximizing the resources of the pharmaceutical industry emporiums in medical management. And what advances are there in surgical management?

Restorative proctocolectomy with ileoanal reservoir is the procedure of choice for patients with UC in the three modalities: conventional, laparoscopic and robotic surgery. [69] In addition, there are other surgical techniques that perform colectomies (leaving straight), partial and/or endoscopic colectomies.

The indications for surgeries are listed:

- The 1st indication is the detection of high-grade dysplasia or colorectal cancer. [70, 71]
- The 2nd indication is the failure of basic or rescue medical therapy, where the clinical picture is very "impressive", and is accompanied by a wasting syndrome, in a vicious circle of exacerbated chronic malnutrition, severe anemia, intolerance to the oral route, severe dehydration, hydroelectrolyte imbalance, acid-base alterations, etc., which conjugates put the patient's life at risk. [72, 73]
- A third indication is primary sclerosing cholangitis, a hepatobiliary disease that has been linked to UC; colectomy has been associated with a better prognosis. [74]
- The 4th is the toxic colon, where the differential diagnosis is essential and that it is real, to perform the gold standard surgical procedure (proctocolectomy with temporary or permanent ileostomy or Kock continent ileostomy vs conservative surgery such as the Turnbull-Blowhole technique). [75, 76, 77, 78]
- The 5th indication is grouped into perforations, intractable lower intestinal bleeding and stenosis of the colonic lumen; In this context, it must be specified that if they are caused by UC and not by other more frequent and/or common pathologies of this anatomical segment, for this reason perforations are extremely rare or anecdotal and it is evident that aggressive and highly priority; [79] not as well as hemorrhage presented by a patient due to relapse or with initial diagnosis, since it is impossible for it to lead to emergency surgery due to III-IV hypovolemic shock, [80] as well as benign colonic strictures that do colon do occur but at a lower incidence they must be intervened electively, however most of the "expert" doctors then reconsider a diagnosis of CD, in an erroneous way. [81] It is therefore necessary to carry out studies: colon by enema, colonoscopy, biopsies, selective angiography, etc., ruling out other diagnoses, for elective surgeries measured in partial colectomies that at the same time perform intestinal reconnection and/or prudent use of the stomas in this type of patients. [82]

It is vital to point out that patients with UC who undergo a restorative proctocolectomy present a very high overall satisfaction; four included studies reported satisfaction rates greater than 90%. [83]

It should be considered that subjects affected by **UC**, and who have excellent control of the disease, are completely asymptomatic, without endoscopic or histological activity, and that despite this; they will present with a shortening in the length and distensibility (confused as lumen stenosis) of the colon and/or rectum; eventually becoming (more than 8 years) a "rigid tube" losing coordination of peristaltic movements, rectal capacitance, endoscopic maneuverability among other irreversible chronic damage.

Observations:

- Once the restorative proctolectomy with temporary or permanent stoma is performed in the **UC** and there is not a millimeter of colorectal mucosa, there is no longer any disease. Therefore, its complete surgical extraction guarantees cure of the disease and it is very frequent that the complications of the surgical technique or the anatomical area involved or due to lack of surgical expertise, since without a prior strict pre-surgical protocol that leads to false blame to the **UC**, which no longer exists and condemn the patient instead of a rehabilitation of intestinal conditioning and adaptation (which can last up to a year) of the complex surgery performed, and be condemned to a biological therapy of very high cost and without any statistically and/or scientifically verifiable benefit.
- The so-called pouchitis are typical of the surgical technique (restorative proctolectomy for **UC**) and only require intestinal rest, with antibiotic therapy and steroid therapy, since they are typical of the pelvic reservoir due to bacterial overgrowth, not due to activity of the **UC** that no longer has the patient; and some doctors mistakenly treat them with biological drugs for years, intensively or excessively.
- Anal fistulas, intestinal fistulas or post-surgical stenosis secondary to surgical treatment of **UC**, which become a challenge and/or conflict for the surgeon who comfortably refers the patient to a clinical service, claiming to become the **UC** that no longer exists. has, to **CD** mistakenly, to be treated infinitely or indiscriminately by high-cost anti-TNF drugs (infliximab, adalimumab, golimumab and certoluzimab pegol), anti-integrin drugs (vedolizumab), interleukin 12 and 23 inhibitors (ustekinumab).
- Biologicals that are high-cost drugs such as Infliximab, Adalimumab, Golimumab, Certoluzimab Pegol, Vedolizumab and Ustekinumab, which in the "pivotal" studies, are protocols that have been carried out with few patients and the comparison is against placebo (water) and with a success rate in remission of **UC** well below 30%. In summary, for the authors of this manuscript, its equivalence has to have scientific validity. is in question.

CONCLUSIONS

The doctor must be orthodox, scientific, ethical and incorruptible, leaving aside the tendencies of the clinical practice guidelines carried out without scientific methodology, or the consensus carried out by self-appointed experts, alienating himself from the influence of policies or the pharmaceutical emporiums that provide stimuli to the doctors who indicate it; but all this evoke exorbitant costs due to overdiagnosis and/or overtreatment. With economic benefits for companies and decision makers in the Health Sector in Mexico, but exponentially draining the economy of the public sector and impoverishing the patient's prognosis, due to being deceived and without effective and correct treatment.

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The diagnosis of UC is only valid with the histological report and the specialist in pathology must have the competence to be assertive, incisive and forceful.

To this day, mesalazine continues to be the therapeutic pillar to successfully treat and control patients suffering from UC.

UC should be treated with its respective follow-up, exclusively by the colon and rectal subspecialist surgeon.

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