

## Therapeutical Principles In Ulcerative Colitis

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**ABSTRACT.** The available therapeutic means for Ulcerative Colitis are limited higienic and dietetical measures, corticotherapy, salazopyrina and it's derivatives, immunosupresion, biological treatment and surgery remain the esential ones. The coordination of these means into a therapeutic strategy needs the implication of more factors to be taken into account: the evolution of the disease in attacks interrupted by stabilizing periods, the different seriousness form one pationt to another, the variable affection but still limited a rect and sigmoid concerning 75% of the cases, the medical treatment up to date has only a suspensive effect and so, the maintenance treatment must be followed all one's life. The total recovery is only possible with total proctocolectomy.

**KEYWORDS:** ulcerative, colitis, corticotherapy, immunosupresion, proctocolectomy

### INTRODUCTION

Ulcerative Colitis(UC) is a chronic inflammatory disease of the colon and rectum that often comes only mucosa. Its etiology remains unknown. Therapeutic strategy in this disease is supported by several key concepts:

- UC develops, usually in bouts of remission interrupted,
- Therapeutic Indications depend on the severity and pace of activity of disease flares,
- The current treatment of the disease has only suspensive effect, maintenance treatment should therefore be followed throughout life,
- Healing definitive excision can only be achieved through total proctocolectomy,
- damage most often benign, it can lead to death in two circumstances:

- a late spurt severe or complicated surgery,
- an appearance of a colonic cancer.

Treatment targets three main objectives:

1. Annihilation of the activity flare as quickly as possible
2. Prevent relapses and complications
3. Findings the opportune moment for surgery

### METHODS

The medica ltrreatment

1. Symptomatic: antispastics and diarrhea with how the transit (contraindicated in severe forms). If low-fiber diet is useful during flares of activity in remission phases not warrant any food restriction.

2. Pathogenetic treatment:  
 Salazosulfapiridina (salazopyrin)

Its effectiveness is also demonstrated therapeutic in the treatment of moderate flares at doses of 4-6 g / day, and then as maintenance therapy at doses 2 to 4 g / day. Its therapeutic efficacy is still influenced by relatively frequent side effects that require dose reduction therapeutically useful.

Salicylic derivatives of salazopyrin.

Salazopyrin is a combination of a molecule of sulfapyridine and 5-aminosalicylic molecule (5-ASA), a gram of salazopyrin containing 0.6 g of 0.4 g of sulfapyridine and 5-ASA. The colon bacteria molecules cleaved releasing the two components mix. Since 1977 it is known that the molecule 5-ASA is an active therapeutic and side effects for the most part are given by sulfapyridine. This led to the development of 5-ASA preparations are presented in two forms: oral and rectal.

Rectal preparations 5-ASA and 4-ASA. The effectiveness of these preparations in the distal forms of UC in demonstrated intensity flares was moderate in all studies.

Oral preparations of 5-ASA

Effective use rectal preparations are not the only forms of disease in the sigmoid and rectum come down to the splenic angle. Oral administration of 5-ASA active set but the problem of the substance release in the colon, because the product ingested it is absorbed to an extent of 100% in the duodeno-jejenum. There were two fireworks to achieve this goal:

- The conditioning of 5-ASA in order to allow a delayed release and / or progression of the acrylic resin-coated tablets, ethylcellulose granules
- Second trick was to link two moleculue 5-ASA each other, and then are released into the intestine under the influence of bacterial enzymes.

A number of therapeutic studies have shown that oral 5-ASA formulations are active in mild forms of UC doses between 2 and 4 g / day. The advantage of these preparations compared salazopyrin is not so in terms of effectiveness and especially better tolerance.

The mode of action of 5-ASA:

The active substance appears to act on different mechanisms of inflammation and immunity: effect of leukotriene inhibitor of the production of platelet-activating factor, the inactivation of free radicals,

alteration the function of neutrophils, inhibition of immunoglobulin synthesis.

#### Corticosteroids

Their effectiveness during outbursts of moderate to severe UC has been demonstrated over time. It is taken by local forms of disease and distal general about the rest. Intravenous route is reserved serious. Corticosteroids have no justification for maintenance treatment, they not preventing the emergence flares of activity.

#### Other therapeutic methods

Biological treatment. For this treatment benefits:

- UC patients with moderate / severe who have not responded to treatment with corticosteroids and immunosupresoare in adequate doses have this treatment is contraindicated or has produced adverse effects.
- Patients with severe ulcerative / fulminant, resistant to intravenous corticoterapia

After obtaining informed consent of the patient can use infliximab (Remicade); slow infusion is administered intravenously, 2:00 in gastroenterology ward. 3 is achieved remission induction dose at weeks 0,2,6 and maintenance of remission is achieved with doses every eight weeks. Patients require monitoring for 2 hours after infusion. Adalimumab (Humira) - subcutaneously; induction of remission is achieved with 2 doses at weeks 0 and 2, and maintain remission by self-administered dose every 2 weeks.

Parenteral nutrition is ineffective in severe UC flashes. Contrary to what deeply entrenched in public health, UC is not a psychosomatic disease and thus prescribing psychotropic and psychotherapy are useless. Immunosupresors have none, or a very small role in the treatment of UC.

#### Surgery

At present it has four types of surgery:

- Proctocolectomy with definitive ileostomy, continent or not;
- Total colectomy with ileo-rectal anastomosis;
- Subtotal colectomy with ileostomy and sigmoidostomie;
- Ileo-anal anastomosis.

The first two methods exist for a long time and both their advantages and disadvantages as well known. The third method is the initial step in HOT urgent surgical treatment of serious and is followed by restoring continuity of ileo-anal-rectal or ileum anastomosis. Ileo-anal anastomosis is more recent. It consists of a total colectomy, rectal mucosectomie, making an ileal reservoir and ileo-anal anastomosis. The definitive eradication of the disease has the advantage that total Proctocolectomy with ileostomy, without imposing a definitive ileostomy. Inconvenient method consists mainly in the large number of fecies the patient will have, requiring even wearing a permanent diaper.

#### Therapeutic Indications

- rectum and rectosigmoidite
- They are the most common forms of the disease,

and treatment is the topic chosen locally. Use microclisme 5 ASA (Pentasa 1 g) and absorbable corticoids topical or slightly absorbable at bedtime for 4-6 weeks. In distal forms, commonly benign, maintenance treatment is not indispensable, except in cases with frequent relapses. In this situation the best solution is the prolonged use of microclismes or if possible with 5-ASA suppositories.

- gripping forms colonic wider and made of light or moderate activity

It is necessary to introduce salazopyrin (3-4 g / day) or 5-ASA 4 g / day; in case of failure resort to cortisone general about (0.75-1 mg prednisolone / kg) to clinical and endoscopic remission. Then doses of cortisone are progressively reduced and stopped. Maintenance treatment with one of salicylic derivatives is required to be maintained for life.

- serious forms

Classic regimen is as follows:  
 - Setting up an intensive medical treatment for 5 days including: parenteral nutrition; ionic imbalances, and anemia, parenteral corticosteroids (1mg / kg) and rectal tracking medical-surgical twice a day. Any worsening during these 5 days of treatment leads to surgery.

#### Complications

Colonic perforation has immediate surgical indication. If massive bleeding or a toxic megacolon (with transversal expansion above 7 cm diameter) can tempt intensive medical treatment had been performed only in case of failure to intervene surgically. The discovery of cancer during the course of disease has also surgical indication. Also severe dysplasia, even in the absence of acute inflammation is an indication of surgery. Note that dysplasia can be detected not only in a systematic biopsy and endoscopic prosecutions instituted at all cases after ten years of development.

- Continue chronic forms

They represent 10-15% of the cases of the UC and are controlled only with high doses of corticosteroids, azathioprine or used for a long time; and in these situations surgical sanction is imposed.

Particular cases  
 UC contraception and pregnancy.

In patients with no contraindications UC no oral contraceptives or pregnancy. A spurt activity from a pregnant was treated like any flare of disease activity. There is discontinued maintenance salazopyrin during pregnancy.

- Instead of conclusions:

Death of a UC patient with severe relapse within a medical error is the result of a surgical indication or made too late. A maintenance therapy should be discontinued correctly indicated not only in the event of force majeure.

Definitive cure of the disease is possible with the help of surgery, but the cost of a mutilation (ileo-anal anastomosis, even if it preserves natural anus). New

salazopyrin derivatives are better tolerated but not more efficient. UC is not a psychosomatic disease.

## REFERENCES

1. Modigliani R. - Traitement from UC - Rev Prat. Paris, 1991
2. LJ Kodner, Fry RK, Fleshman JW. - The surgical management of intlammatoiy bowel disease. Curr Opinion Gastroenterol 1990
3. Modigliani Fi, Bernades P. - Diseases of the digestive tract and pancreas During pregnancy. In Barron WM, MS Lindheimer eds. Medical Disorders During Pregnancy 1990.
4. Recomandarea si monitorizarea terapiei biologice in bolile inflamatorii intestinale nespecifice, Ministerul Sanatatii 2013
5. Tom Øresland, Willem A. Bemelman, Gianluca M. Sampietro, Antonino Spinelli, Alastair Windsor, et.all. D'Hoore on behalf of the European Crohn's and Colitis Organisation (ECCO)European evidence based consensus on surgery for ulcerative colitis DOI: <http://dx.doi.org/10.1016/j.crohns.2014.08.012> 4-25 First published online: 19 December 2014
6. Axel Dignass, James O. Lindsay, Andreas Sturm, Alastair Windsor, Jean-Frederic Colombel, et.all. Van Assche Second European evidence-based consensus on the diagnosis and management of ulcerative colitis Part 2: Current management DOI: <http://dx.doi.org/10.1016/j.crohns.2012.09.002> 991-1030 First published online: 1 December 2012

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