Scholars Journal of Applied Medical Sciences (SJAMS)
Abbreviated Key Title: Sch. J. App. Med. Sci.
ISSN 2320-6691 (Online)
ISSN 2347-954X (Print)

A Unit of Scholars Academic and Scientific Society, India
www.saspublishers.com

Visceral Pediatric Surgery

Surgical Treatment of Ulcerative Colitis in Children

Driss Hanine*, Jaouad Bouljrouf, Zakaria Aboulam, Mounir Kisra
Visceral Pediatric Surgery Department "A" – Children Hospital of Rabat, Faculty of Medicine of Rabat, Morocco

Original Research Article

***Corresponding author**
Driss Hanine

Article History
Received: 12.11.2018
Accepted: 26.11.2018
Published: 30.11.2018

DOI:
10.36347/sjams.2018.v06i11.079

Abstract: Ulcerative colitis is a chronic inflammatory bowel disease. It's a medico-surgical affection; their treatment is initially medical and become surgical in the event of complications or failure of medical treatment.Our retrospective descriptive study about the ulcerative colitis, reports the experience of the Department of Surgery A Children's Hospital of Rabat in the Field of support for UC in children, as well as the place of surgery in the treatment. Our study aimed to explain the epidemiological, clinical and laboratory of ulcerative colitis in children, and to specify the indications and the role of surgery in the management of this disease. Surgical treatment was indicated in our patient resistant to medical treatment with close pushups in a growing child, and the surgical technique used was total proctocolectomy with ileo anal anastomosis, which is the surgical reference in UC. Conservation decision after surgical treatment of rectal ulcerative colitis, must take into account, the state of the rectum and the risk of malignant degeneration. The postoperative course of our patient was marked by a normalization of transit though the tank was not made up.
Keywords: Ulcerative colitis, surgical treatment, children.

INTRODUCTION

Ulcerative colitis (UC), or ulcerative colitis, is a chronic inflammatory bowel disease (IBD) that constantly affects the rectum, and can extend continuously higher or lower in the colon, while respecting the rest of the tube. Digestive. It is part of IBD that also includes Crohn's disease (CD) and indeterminate colitis.

Ulcerative colitis is a rare disease in children, but it does pose many problems in terms of diagnosis and treatment. The cause of the RCH remains unknown (cryptogenetic), but the progress of the medicine makes it possible to move towards the existence of environmental and immunological factors which, on a genetically predisposed ground will lead a cascade of reactions which will lead to the appearance of the disease.

It is a chronic disease with phases of activity (or "outbreaks") of varying intensities, interspersed with periods of remission, which can be very long. The diagnostic approach is based on a bundle of clinical, biological, endoscopic, histological and radiological arguments, and must lead to the identification of ulcerative colitis and the elimination of other causes, particularly infectious ones.

The incidence of UC is lower in pediatrics than in adult pathology, but the impact on weight-for-height growth, pubertal development, and the psychological problems they cause, as well as the extension of lesions to diagnosis, constitute factors specific to this age.

These specificities of pediatric ulcerative colitis as well as its possible impact on the socio-occupational life warrant appropriate management to control the disease without compromising growth. The RCH is a medical and surgical condition, its treatment is mainly medical and becomes surgical in case of complications or failure of the medical treatment.

MATERIALS & METHODS

Our work was done in the A Surgery Department of Rabat Children's Hospital. This is a retrospective study of a patient who was operated on for RCH.

The purpose of the work is:

- To specify the indications and the place of the surgical treatment in the management of the RCH in the child.
- To highlight the different surgical aspects of the disease.
- To recount the experience of the Department of Surgery A of the Children's Hospital of Rabat, concerning this inflammatory colitis.

RESULTS

This is an 8 year old girl with no particular pathological background. The history of his illness was at 7 years of age, with the gradual onset of bloody and purulent diarrhea at 5 stools / day, with abdominal cramp-like peri-umbilical pain. All evolving in a context of fever, arthralgia, and not encrypted weight loss. Clinical examination is showing a patient in fairly good general condition, with a weight-loss delay at -3 D.S.

A hemogram shows hypochromic microcytic anemia. An inflammatory syndrome is present (high VS and CRP). An ionogram shows hypoprotidemia. The patient benefited from the ANCA and ASCA search, the ASCA search was negative, and the ANCA positive.

The co-parasitology of the stool was negative. The passage of the small intestine did not indicate any parietal or endoluminal lesions affecting the different hailtic loops observed, and the ileocecal junction was without anomalies. The barium enema showed superficial ulcerations visible in the left and transverse colon.

Ultrasound showed diffuse thickening, mainly of the left colon and sigmoid with presence of hepatomegaly. Rectosigmoidoscopy revealed a sigmoid mucosa that is the seat of ulcerations and polypoid formations on diffuse erythematous mucosa, with bleeding in the rectum. The attack concerned the whole colonic framework as well as the rectum.

Anatomo-pathological examination of biopsy specimens revealed ulcerative colitis with polymorphic inflammatory infiltrates. On the basis of these results, the diagnosis of ulcerative colitis was retained, and the patient was treated with oral corticosteroid therapy at a rate of 1.5 mg / kg / day for two weeks and then decreased by 5 mg / week. when stopped, as well as mesalazine at a rate of 100 mg / kg / day. The patient also benefited from continuous flow enteral nutrition (NEDC).

A bolus of solumedrol was used in the presence of high oral corticosteroid resistance. Immunosuppressive therapy was also administered but unsatisfactory. Faced with the resistance to medical treatment with the occurrence of close-ups in a growing girl, the indication for surgical treatment was asked. The surgical technique used was total coloproctectomy with ileoanal anastomosis without making the reservoir. The evolution was marked by a normalization of transit. The patient is always followed with an endoscopic assessment and biopsies.

DISCUSSION

Surgical treatment of ulcerative colitis (UC) aims to resect the entire colonic mucosa already ill or likely to become [1]. Recommendations for the management of UC were written in 2008 [2], based on the consensus of the European Organization for Microbiology (ECCO). The latter was updated in 2012 [3] but the indications continue to change because the surgical treatment of the RCH evolves permanently.

The choice of an intervention is based on several factors, including the indication and urgency of the surgery, the age, the general condition and the state of the anal function. Currently the indications of surgery are based on two components: Urgent indications and elective indications "cold".

- Urgent indications include: massive hemorrhage, toxic megacolon, colonic perforation and failure of medical treatment of severe acute colitis refractory to intravenous corticosteroids [4-7].
- The elective indications include: chronic, active and recurrent RCH, stunting and prevention of colon cancer. It is important to distinguish between subtotal colectomy, an emergency intervention within the framework of an AGC and which is not a definitive intervention, and interventions that will be performed electively ("cold").

Three types of surgical interventions can then be proposed: total coloproctectomy (CPT) with AIA, which is the reference procedure, CPT with definitive ileostomy and total colectomy with ileo-rectal anastomosis (AIR). Only CPT, whether associated with sphincteric preservation or the creation of a definitive ileostomy, allows the resection of all the lesions of RCH and thus minimizes the inflammatory and degenerative risks. Total colectomy with AIR is a technically simpler procedure, better tolerated, but at the risk of rectitis and cancer on the left rectum.

Today, the AIA is the reference surgical procedure in the RCH [8], because it makes it possible to reach the double objective of curing the disease by removing all the diseased colorectal mucosa, and to preserve sphincter function. But in some situations, AIR can be offered as first intention. Here again, the prerequisite must be the existence of a normal or slightly ill rectum according to the double endoscopic and radiological assessment [9]. No prospective study compared the results of AIA and RIA for patients where both options were feasible. The AIR exposes the double risk of progressive progression of the disease and especially of neoplastic degeneration, justifying close monitoring of the remaining rectum.

A desire for pregnancy in a young woman must now reconsider the realization of an AIA. Four studies [8, 10-12] have all reported a significant reduction in fertility after making an AIA. In contrast,

there was no difference in fertility before and after the diagnosis of UC. This fall in fertility was 35% in the first Olsen study [10] but reached 80% in its second study [8], which compared the fertility of patients with AIA and a control population. In total, these studies argue in favor of impaired fertility after CPT with AIA.

On the other hand, among women of childbearing age, the chances of a full-term pregnancy are divided by 5 in an Olsen survey [8]. This is probably due to tubal adhesions due to pelvic dissection. There is no fertility data after AIR for RCH. The results of a case-control study are also available for 230 patients with PAF. After AIR, fertility was identical to that of the normal population, whereas after AIA, fertility decreased by half [13].

AIR is a technically simpler intervention, not requiring temporary ileostomy for protection. After AIR, approximately 50% of patients have a satisfactory functional result (less than four stools per day), 25% retain chronic proctitis requiring permanent local treatment, and 25% have recurrent relapses [14]. In the latté, the functional result is often mediocre to discuss a more or less long term secondary proteomy with AIA. The functional results of an AIA after AIR are comparable to those of an AIA performed immediately [15]. The risk of rectal cancer requires endoscopic surveillance with biopsies for life. This risk increases with time is estimated at 13%, 25 years after an AIR. All series report the poor prognosis of cancers after AIR due to a high proportion of tumors discovered at an advanced stage [16]. Endoscopic monitoring of the rectum is imperative. There is no clear consensus for the pace of monitoring. According to some authors, performing an endoscopy with biopsy every 6 months beyond 10 years of evolution of the disease, would be desirable.

According to the CPR Clinical Practice Guidelines (CPR), the current criteria to be met for performing an RIA are: no dysplasia or colorectal cancer, disease that has been present for less than 10 years at the time of surgery [17].

CONCLUSION

Ulcerative colitis is a chronic inflammatory bowel disease that starts in 10 to 15% of cases before the age of 15 years. It constantly reaches the rectum, and variably, the colon without healthy mucosa interval. It results from an interaction between host immunity and intestinal microbiota favored by environmental factors in genetically predisposed patients.

The symptomatology is dominated by chronic bloody diarrhea in cases of extensive colitis, a rectal syndrome predominant in distal forms. The disease is sometimes revealed by severe acute colitis or extradigestive manifestations.

Colonoscopy with biopsies allows diagnosis based on a bundle of clinical, endoscopic and histological evidence. An infectious cause must always be eliminated.

The disease usually progresses with relapsing remissions and may be complicated by haemorrhage, perforation or toxic megacolon. In the long term, there is a risk of colorectal cancer favored by the extension of the disease, the duration of evolution and the association with primary sclerosing cholangitis requiring appropriate screening.

The mild and moderate forms are treated with oral or topical 5-ASA depending on their extent. In case of failure, a corticotherapy is instituted. In the case of severe acute colitis, after failure of intravenous corticosteroid treatment for 5 to 7 days, resort therapy should be initiated with infliximab or ciclosporin, or even colectomy.

The maintenance treatment is carried out with 5-ASA in mild and moderate forms, with thiopurines in case of corticoresistance or with anti-TNF. The coloproctectomy with ileoanal anastomosis (AIA) on reservoir J is the surgical treatment of choice, because it allows at the same time the eradication of all the mucous recto-colic patient and the conservation of a normal transit, nevertheless, the surgical solution is not always without complications.

Initially burdened with a long morbidity and many functional failures, its results have now improved significantly thanks to the technical improvement. The study of indications and complications of surgical treatment of colitis remains very intriguing. Thus, the earlier the indication is given and in times of quiescence, the lower the morbidity and the better results.

Our retrospective descriptive study about a case of RCH, reports the experience of the Surgical Service A of the Children's Hospital of Rabat regarding the management of the RCH in the child, as well as the place of surgery in the treatment.

Conflict of interest

All the authors declare that they do not have any conflict of interest.

AUTHOR'S CONTRIBUTION

All authors contributed to the writing of this manuscript. All have read and approved the final version of the latter.

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