Ulcerative colitis in children at Campus Teaching Hospital of Lome-Togo: A report of two cases

Abstract

Ulcerative colitis is one of the chronic inflammatory bowel diseases which, together with Crohn's disease, constitute a public health problem in industrialized countries, where they mainly affect young adults and children from the age of 15. Inflammatory bowel diseases are described to be rare in black African subjects. A delay is noted in our context in the diagnostic of ulcerative colitis, due to the scarcity of gastroenterologists and gastro-pediatricians. Patients repeatedly consult general practitioners who do not perform endoscopic explorations and often dismiss the symptoms as simple enteritis. We report the first cases of ulcerative colitis in two children in Togo and describe their diagnostic and therapeutic course

Keywords: ulcerative colitis, inflammatory bowel disease, children, Togo

Introduction

Ulcerative colitis (UC) is a chronic inflammation of the digestive tract exclusively affecting the rectum and colon [1]. It is one of the chronic inflammatory bowel diseases (IBD) which, together with Crohn's disease, constitute a public health problem in industrialized countries, where they mainly affect young adults [2]. However, these diseases are clearly on the rise in developing countries and are increasingly diagnosed in young subjects and children from the age of 15 [3]. UC is described as rare in Africa compared to the West [4]. In Togo, Bagny et al reported a case of IBD in a 14-year-old teenager but it concerned Crohn's disease [5]. The aims of this work were to report the first cases of UC in two children in Togo and to describe their diagnostic and therapeutic course.

Observation 1

A 30-month-old infant brought in by his parents was admitted for glairo-sanguinous diarrhea that had been evolving for 13 months before the consultation at a rate of 6 to 8 stools per day. He is the second child of the family whose eldest is 5 years old alive and well. He had no fever or vomiting. There was a progressive deterioration of the general condition with a marked anemia (hemoglobin level at 6.8 g/dl) that required a blood transfusion in a health facility. The parents consulted general practitioners and pediatricians on several occasions. He was regularly put on fluconazole and metronidazole without success. On examination, the child was very irritable and weighed 9.2 kg, not febrile and in poor general condition. Total colonoscopy performed under sedation down to the caecal floor had noted a very erythematous recto-colic mucosa as a whole,

fragile and bleeding easily on contact; with disseminated ulcerations; multiple staged biopsies were performed. The anatomopathological examination of the biopsies noted: the colonic mucosa shows a weakened and sometimes detached lining. The chorion is thickened by a polymorphic inflammatory infiltrate of marked density; the glands are sometimes elongated and bordered with a partially depleted mucosal lining; without dysplasia; cryptic abscesses are visible; congestion and edema are moderate without specific lesions; this was in favor of ulcerative colitis. The blood test for ASCA was negative and for pANCA positive. The blood count showed a hemoglobin level of 9.2 g / dl, 10,000 leukocytes with 6,200 polymorphonuclear neutrophils; the C reactive protein was 17 mg / l; the sedimentation rate was 77 mm in the first minute; serum creatinine at 2 mg / l; the liver function test and blood ionogram were normal. The patient was put on mesalazine (granules) 500 mg daily. One month after the start of treatment, there was a persistence of diarrhoea at the rate of 3 to 5 stools per day always glairo-sanguinous; it was thus associated a corticosteroid therapy containing prednisone 10 mg per day for 14 days. At the end of this association with corticosteroid therapy, there was a reduction in the number of stools to 2 per day, not glairo-sanguinous, with a normal appearance; a better clinical condition with a weight of 10.5 kg; a non-irritable child; mesalazine was continued after stopping corticosteroid therapy. Six months after the start of treatment, 2 stools per day with normal appearance were noted.

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Observation 2

A 12-year-old teenager accompanied by his mother was seen in consultation for a daily rectal bleeding evolving since the age of about 7 years, which sprays the toilet bowl regardless of the consistency of the stools without any notion of mucus or deterioration of the general condition; neither abdominal pain nor proctalgia nor diarrhea nor constipation. He is the 5th in a family of 5

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children with living healthy siblings; no particular history in the parents. The patient has received several modern (metronidazole, albendazole, ciprofloxacin) and traditional treatments without success. On examination of this teenager in good general condition and weighing 42 kg, a healthy anal margin without fissure was noted; total colonoscopy performed up to the caecal floor noted an inflammatory zone 5 to 6 cm from the anal margin; circumferential erythematous of about 2 cm in height, bleeding easily on contact and biopsied; the rest of the colonic mucosa was of normal appearance. The anatomopathological examination noted a rectal mucosa with slight chronic inflammatory changes without specificity. The blood test for ASCA was negative and that of pANCA positive. The biological assessment noted a creatinine level of 5 mg/l; the hemoglobin level was 11g/dl microcytic hypochromic; the C-reactive protein was 5 mg/l. A mesalazine-based treatment (suppository) was initiated at a rate of 1g x 2 per day. An improvement in rectal bleeding was noted after 1 month of treatment. At 6 months after the start of mesalazine treatment, no more rectal bleeding was noted.

Discussion

IBD and in particular UC are very rare conditions in children. They are often increasingly diagnosed in young subjects and teenagers [6]. Infants and toddlers most often present with several digestive signs related to other causes, particularly infectious ones. It is the persistence of symptoms after adolescence that draws the attention of practitioners to IBD. Our two patients are male. A male predominance of UC is noted in the literature but the opposite has been observed in children and remains unexplained [7]. The pathophysiology of UC or IBD in general involves many environmental and genetic risk factors. Environmental factors are not well known but seem to be associated with the modern western lifestyle and the level of hygiene [8]. There is a familial predisposition for UC although much lower than for Crohn's disease. It is a disease that

can affect several members of the same family with so-called "susceptibility" genes. These genes involved in the genetic predisposition to IBD are very numerous (greater than 160) [9]. The percentage of familial forms of IBD varies between 5 and 20% in the literature [10]. The diagnosis of ulcerative colitis is often delayed and difficult and is based on a number of clinical and histological arguments. The delay between the onset of symptoms and the diagnosis is more than one year in our patients. This delay is significantly longer than that observed in France for the diagnosis of IBD, whose median is about 3 months [11]. This long delay in diagnostic in our context noted by other authors [5, 12] could be explained by the scarcity of gastroenterologists (8 for the whole country) and gastro-pediatricians (none in the country). Patients repeatedly consult general practitioners who do not perform endoscopic explorations and often dismiss the symptoms as simple enteritis. Total colonoscopy with biopsies for histological examination is essential for diagnosis. The presence of a biological inflammatory syndrome and perinuclear anti-neutrophil antibodies (pANCA) are also important elements that help make the diagnosis of UC. Therapeutically, the use of traditional drugs and antibiotics by our patients prior to diagnosis is a factor that could worsen the disease with a disorganization of the intestinal microbiota. Treatment of UC involves medications that regulate the functioning of the patient's immune system, anti-inflammatory drugs and immunosuppressants. Anti-TNF drugs are also used in children with indications and dosages comparable to those of adults [13]. Another pediatric specificity is the use of nutritional assistance, mainly in the form of cyclic enteral nutrition, which is as effective as corticosteroids [14] but anti-TNFs and nutritional assistance are not available locally. Our two patients benefited from mesalazine with a good clinical evolution and amendment of symptoms. This treatment must be maintained over the long term, hence the need for therapeutic education involving the parents.

Conclusion

UC or IBD in general are diseases that affect more the elderly but are increasingly diagnosed in children. UC should be rapidly evoked in children and infants presenting symptoms such as rectal bleeding and chronic diarrhea in order to ensure early diagnosis and care.

Statement of informed consent

Informed consent was obtained from the parents of the children included in the study.

COMPETING INTERESTS DISCLAIMER:

Authors have declared that no competing interests exist. The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

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