

Ulcerative colitis in young children, A Case report

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Abstract

Ulcerative colitis is one type of the inflammatory bowel diseases that affect the rectum and the colon. The usual age of presentation is at adolescence and adulthood. It is rarely seen during infancy and in young children. Our case, Mohammed, was presented at the age of 18 months with persistent bloody diarrhea that did not respond to the usual antibiotic and antiparasitic drugs. All the investigations that were done during the period of the illness (more than 9 months) were non

conclusive. Then colonoscopy were done which revealed the picture of ulcerative colitis. The patient then was put on oral steroid and salazopyrine with dramatic improvement in the general condition and disappearance of bloody diarrhea. Now the patient is on salazopyrine orally with steroid only in exacerbations.

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Introduction

Inflammatory bowel disease (IBD) is a group of idiopathic, chronic disorders that includes Crohn disease and ulcerative colitis. The cause is poorly understood, and the natural course is characterized by unpredictable exacerbations and remissions ⁽¹⁾. The most common time of onset of IBD is during adolescence and young adulthood. A bimodal distribution has been shown with an early onset at 15-25 yr of age and a second smaller peak at 50-80 yr of age. IBD is often reported to be more common in urban areas than in rural areas. In developed countries, these disorders are the major causes of chronic intestinal inflammation in children beyond the first few years of life ⁽²⁾.

Ulcerative Colitis

Ulcerative colitis is a disease that causes inflammation and sores, called ulcers, in the lining of the large intestine. The inflammation usually occurs in the rectum and lower part of the colon, but it may affect the entire colon. Ulcerative colitis rarely affects the small intestine except for the end section, called the terminal ileum ⁽³⁾. Ulcerative colitis may also be called colitis or proctitis. Ulcerative colitis has been noted to present in infancy, although this is very unusual. One needs to be cautious when evaluating reports of ulcerative colitis in infancy because dietary protein intolerance may be easily misdiagnosed as ulcerative colitis in this age group ⁽⁴⁾.

Patient and Result

Mohammad Waly Shihab is a 3 years old boy presented at the age of 1.5 year with persistent bloody diarrhea, admitted to the Department of pediatric, Tikrit Teaching Hospital, which did not respond to both metronidazole and diloxanide furate. The diarrhea comes in attacks and sometimes the patient passed fresh blood per rectum.

There were no other clinical symptoms and signs other than low

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grade fever and mild degree of failure to thrive. There was no arthritis or skin rash.

General stool examination revealed semi liquid brown stool with 10-12 pus cells and 8-10 RBC with no evidence of cysts or traphozoites. Stool culture reveals only growth of candida albicans.

Hematological investigations revealed mild hypochromic-microcytic anemia with increased in the total WBC count with neutrophil predominance.

After 9 months from the beginning of illness colonoscopy were done with biopsies were taken from the sigmoid and the colon, which revealed non-specific proctitis with multiple crypt abscesses but no granuloma is seen.

Barium enema was not done in our patient because the dye required was not available. The patient was then diagnosed as ulcerative colitis and start treatment with prednisone 2mg/kg for 3 weeks initially and salazopyrine for 2 weeks then another course of both drugs were given for 45 days.

The patient dramatically responded to the treatment with improvement in the general condition and disappearance of bloody diarrhea.

Now the patient is on salazopyrine orally with steroid treatment during the acute exacerbation.

Fortunately our patient is not in need till now for immunotherapy or surgery because of dramatic response to the initial treatment with sallazopyrine and steroid.

Discussion

Although ulcerative colitis is one of the major causes of bloody diarrhea during the adolescent and the adulthood periods, it is less commonly seen in children. It affects mainly children after the first years of life and it is unusual to see ulcerative colitis in infancy⁽¹⁾.

In spite of the repeated presentation of our patient with bloody diarrhea which did not respond to the usual treatment of amoebic and bacillary dysentery and in spite of negative investigations which were done repeatedly during the 9 months of the illness, the suspicion of inflammatory bowel disease was too late because of unusual presentation of the disease at this age^(1, 5).

The major disease of differential diagnosis of bloody diarrhea at this age was cow milk protein intolerance and Crohns disease^(1, 2). Our patient was breast-fed and now on the usual family diet with little infrequent intake of prepared milk. Both cow milk protein intolerance and Crohns disease can be excluded by the typical histopathological findings of biopsies that were taken by colonoscopy and segmoidoscopy which revealed proctitis and crypt abscesses which are typical picture of ulcerative colitis⁽¹⁾. Colonoscopy also is important in defining the extent of the disease⁽⁶⁾. The colonoscopy also excludes Crohns disease by absence of granulomas characteristic of Crohns disease⁽¹⁾.

What is important to be noticed in our patient is that in spite of long period of the illness (around 9 months) the patient has no other signs of ulcerative colitis like skin rash or features of arthritis⁽¹⁾. This may be due to that these features usually appear around adolescence and are unusual presentation of ulcerative colitis at this very young age of our patient⁽⁴⁾.

The hematological investigation of our case was consistant with the diagnosis of ulcerative colitis. The type of anemia was hypochromic-microcytic which may be either due to continued blood loss from the intestine or due to the fact that microcytic anemia is a

feature of chronic inflammatory disorders due to the misuse of iron during the inflammatory process. The increased WBC count is consistent with ulcerative colitis, which indicates the presence of inflammatory process in the body⁽⁷⁾.

General stool examination revealed the presence of blood cell and pus and this picture is seen in ulcerative colitis due to the damage to the bowel mucosa or this picture may be seen due to infection of the bowel that may accompany the inflamed bowel⁽²⁾.

The definitive diagnosis of ulcerative colitis in our patient is done by sigmoidoscopy and colonoscopy with biopsies taken from the sigmoid and the colon which revealed picture suggestive of ulcerative colitis with non specific proctitis and multiple crypt abscesses with no granuloma⁽¹⁾. This picture confirms the diagnosis of the case and excludes the other differential diagnosis like Crohns disease and cow milk protein intolerance⁽⁴⁾.

The rapid response of our patient to the treatment with salazopyrin and steroid orally (initially only) and then continuation on the salazopyrin orally only with improvement in the physical growth and improvement in the appetite and general condition of the patient with rapid disappearance of the bloody diarrhea suggest a mild degree of the disease.

Our patient is now followed clinically by assessment of physical growth (weight, height and weight for height) to identify early features of under growth, which may be due to the disease itself⁽¹⁾, or due to the effect of treatment⁽⁸⁾.

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