Non Perianal Fistulas in Crohn's Disease and Short Bowel Syndrome: What We Can Do?

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CASE REPORT

SUMMARY

Crohn s disease (CD) is a lifelong disease arising from an interaction between genetic and environmental factors, but seen predominantly in the developed countries of the world. The precise etiology is unknown and therefore a causal treatment is not yet available. Fistulating Crohn's disease includes fistulas arising in the perianal area, together with those communicating between the intestine and other organs or the abdominal wall. Non perianal fistulas include fistulas communicating with other viscera (urinary bladder, vagina), loops of intestine (enteroenteral fistulas) or the abdominal wall (enterocutaneus fistulas). The diagnostic approach is a crucial aspect in the management of fistulating CD as the findings influence the therapeutic strategy. Short bowel syndrome caused by extensive bowel resection should be initially treated with nutritional support and can caused serious treatment and reevaluating problems. We review this uncommon manifestation in a high risk patient after multiple operations and severely shortened bowel and also with non perianal fistulating CD.

Keywords: Crohn's disease, non perianal fistulas, short bowel disease

1. INTRODUCTION

Fistulating form of Crohn's disease (FCD) appears in perianal region, but also includes communication with the intestine to other organs or abdominal wall (1, 2, 3). The main aspects to be considered when planning management strategies FCD are:

- Position and opening of the fistula and its anatomy.
- Determine the presence of inflammation or stenosis
- Identify or exclude local sepsis (abscess).
- Determine which organs are affected and analyze their impact on symptoms or quality of life.
- Evaluate the nutritional status of the patient (1).

The basic fistula shapes are perianal fistula and non-perianal fistula.

In a series of 202 consecutively selected subjects with CD 54% suffered from perianal complications. Prevalence of fistula depends on the primary localization of CD. Perianal fistula were recorded:

- 12% of patients with CD with iliac localization
- 15% of patients with CD with iliac-colic localization
- 41% of patients with the colic localization and moderate rectal affection

• 92% affected with colic localization and full rectal affection

Non-perianal fistulas include fistulas that communicate with other organs such as bladder and vagina, and then enteroenteral fistula and enterocutaneous fistula. There is a significant lack of valid clinical information on this issue. Diagnosis is established on the basis of endo-

scopic ultrasound, exploration under general anesthesia (EUA), fistulography, computerized tomography (CT), and magnetic resonance imaging (MRI) (2).

2. CASE REPORT

Patient E.LJ., male, aged 39 years. The disease began with stomach pains and diarrhea in 1997. Colonoscopy is done which showed up to 20 cm of normal finding and without possibility for further advancement because the stenosis is present. Further treatment continued with irrigography and passage to the small intestine. Verify are enterocutaneous and enterovesicular fistula with lumen narrowing in the sigma. Initiated is corticosteroid therapy with mesalazine. On 02 July 1998 a surgery is performed by laparatomy with the median and partial resection of ileum, sigma, cistostomy, ileostomy, and appendectomy, revision of enterovesicular fistula and terminoterminal anastomosis. Surgery on 07 August 1998 included the re-resection of the ileum in the period from 1998 to 2005 the patient was on hormonal treatment with antibiotics, corticosteroids and mesalazine. In this period, the enterovesicular fistula is symptomatic. During 2005 comes to worsening of the disease with verified intra abdominal abscesses (CT), enterocutaneous fistula, enteroenteral and enterovesicular fistula with incomplete stenosis of the ileum and ascendant colon and transverse colon (intestine passage X-ray and CT).

In therapy, in addition to intensive antibiotic therapy, nutritional support also included was azatioprim 100mg. Despite all the therapeutic procedures for stenosis indicates was surgical treatment. Surgery on 09 June 2005 includes repeated laparatomy and resection of the transverse ascendant colon and iliac transversal anastomosis. From 2005 until 2008 the therapy included: Corticosteroids, Azatioprim, Mesalazin, antibiotics, fol-



FIGURE 1. Scars from enterocutaneous fistula



FIGURE 2. CT of the abdomen after medication therapy

lowed by supportive therapy and substitution therapy.

In the treatment of patient, there were limiting factors such as maladjustment of the patient to endoscopic diagnosis even in conditions of general anesthesia, inability to use MRI due to dental implants and three previous surgeries with a total shortening of the intestine to 103 cm.

Three years of immunosuppressive therapy lead to a clear improvement of clinical score disease activity. On the wall of the belly remained only scars from previous surgeries and enterocutaneous fistula (Figure 1).

On native and contrast CT scans of the abdomen and pelvis cannot prove extravasations after oral application of contrast. Right pelvic wall had local thickening at one of the small intestine curves with contact to small intestinal convolution conglomerate whose wall cannot be adequately seen probably due to adhesive postoperative changes. Mentioned conglomerate of intestinal wall curves with gently thicken wall lay on the right posterior contour of bladder which is in the same area with the evident retraction with retraction of the right vesicle urethral delta. In the same region it cannot be confirmed or excluded possible existence of the fistula.

CT findings of the liver, spleen, pancreas and adrenal glands are normal (Figure 2). In both kidneys can be seen hyper density zones of calcium. During examination became obvious

place of enterocolic anastomosis, which is functional, with normal and orderly lumen width and elasticity. There are no signs of enterovesicular fistula.

Surgical treatment is preferred for enterovesicular fistula. Only in patients at high risk (after multiple operations and/or significant reduction in the intestines length), it is proposed medical treatment as first-line treatment as in the case of presented patient who had immune suppressants therapy with antibiotics and nutritional support for active asymptomatic enterovesicular fistula without disease relapse for a period of 3 years (5).

3. DISCUSSION AND

CONCLUSION

The appearance of fistula, especially perianal and enteroenteral is expected finding in the clinical treatment of Crohn's disease. Enterovesicular and enterocutaneous occur in a much smaller percentage, but require a specific approach to diagnosis and treatment. Out of 400 tested patients with the Crohn's disease Gruner and colleagues found only 3 patients the presence of enterovesicular and enteroenteral fistula (2). Surgical treatment of these fistulas with purulent complications is recommended as a method of first choice (2, 3, 4). In high-risk patients after surgery for intestinal stenosis enterovesicular fistula can be successfully treated only with adequate medications. Hormonal treatment of enterovesicular fistula includes exemplary anti-tumor necrosis factors, cyclosporine A and Azothioprine.

Some of these drugs can lead to rapid closure of the enterovesicular (5). The outcome of medication treatment of enterovesicular fistula for the patient presented in this paper and data from literature justifying this approach.

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