

Pyloric Stenosis as a Presenting Symptom of Crohn's Disease

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Abstract

We report a rare case of pyloric stenosis as a presenting symptom of Crohn's disease. Clinical improvement and long-term relief of pyloric obstruction were obtained following a short course treatment of corticosteroids and total parenteral nutrition. In contrast to most of the cases described previously in the literature, surgical treatment was not required.

Key words

Crohn's disease - pyloric stenosis - corticosteroids - total parenteral nutrition

Rezumat

Prezentăm un caz rar de boală Crohn cu simpto-matologia de prezentare a unei stenoze pilorice. Remiterea simptomatologiei și ameliorarea obstrucției pilorice au fost realizate după o perioadă scurtă de tratament cu corticosteroizi și nutriție parenterală totală. Tratamentul chirurgical nu a fost necesar, spre deosebire de majoritatea cazurilor descrise anterior în literatură.

Introduction

Gastroduodenal involvement by Crohn's disease (CD) is relatively rare and occasionally causes PS, for which medical therapy may be ineffective and surgery may be required. With more frequent use of upper endoscopy, however, upper gastrointestinal involvement has been found to be more common than previously suspected.

CD can affect all the gastrointestinal tract, but gastroduodenal involvement is rarely seen (0.5 to 13%) and has distinct clinical, therapeutic and prognostic features. Advances in endoscopic methods and recognition of new histopathologic criteria for diagnosis have revealed an incidence higher than previously reported (1).

About one third of the patients with symptomatic gastroduodenal CD undergo surgery, most of them for (gastro-) duodenal obstruction. Gastroenterostomy with vagotomy is the surgical treatment of choice. Resection, strictureplasty or balloon dilatation maybe performed in selected patients (2). Our case demonstrates the occurrence of PS in a young woman as a presenting symptom of CD and the efficacy of drug therapy in combination with total parenteral nutrition (TPN) without the need of surgical intervention at least for two years follow up.

Case report

A 25-year-old woman was admitted to hospital complaining of a two month history of recurrent vomiting especially after eating and epigastric discomfort with dyspepsia, mild constipation, abdominal pain (right lower quadrant) and weight loss of about 10 kg over the past six months. There was no history of diarrhea or bloody stool, nor a history of peptic disease. Five years earlier the patient had undergone a gastroscopy that was normal. There was no family history of cancer or inflammatory bowel disease.

Physical examination revealed an asthenic female with mild pallor but no neck stiffness. She had a body temperature of 36.2°C, respiratory rate of 14/minute and a regular pulse at a rate of 80/minute. Her blood pressure was 115/60 mmHg. Lungs were clear at auscultation and heart sounds were normal, no murmurs and no friction rub. Abdominal examination revealed a soft abdomen, no tenderness and no organomegaly, bowel sounds were present. Neurological examination was normal. Laboratory results upon admission revealed mild anemia hemoglobin 10.0g/dl with an MCV of 76fl, hematocrit 31%, leucocyte count 8700/mm³, platelets 390000/mm³. Sodium and potassium were both normal.

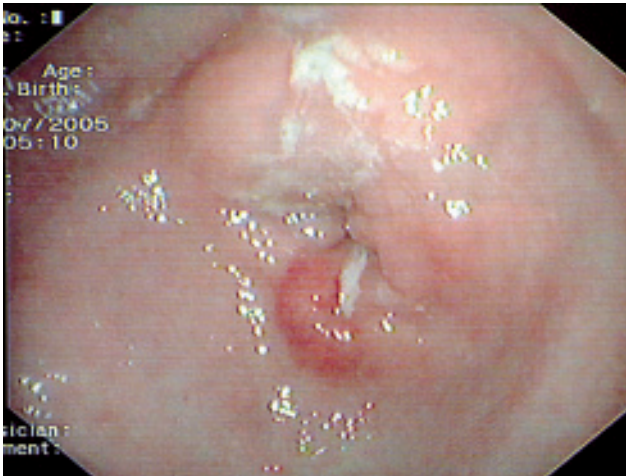


Fig.1 Dilated stomach with pyloric stenosis and multiple superficial erosions and aphthous ulcers.

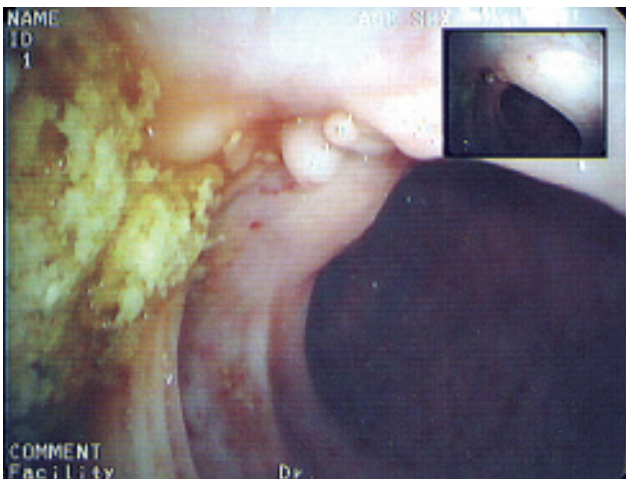


Fig.2 Chronic active ileitis and colitis with superficial erosions and aphthous ulcers.

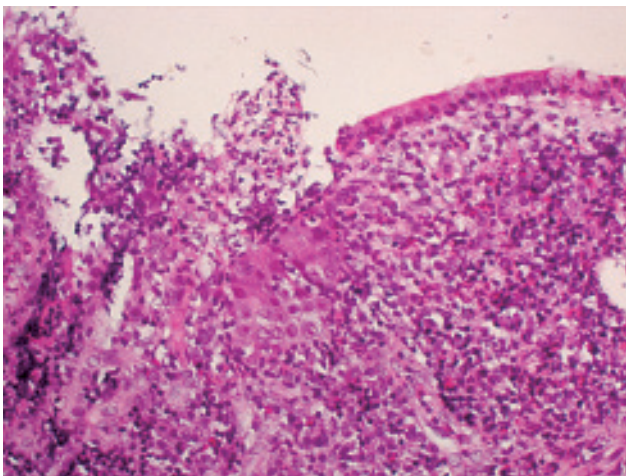


Fig.3 Intermediate power view of histological section from distal stomach (pylorus) showing superficial ulcerations with aphthoid features typical for Crohn's disease (H&E).

Glucose, electrolytes, kidney and liver function tests were all in the normal range. Serum cholesterol 103mg/dl, triglycerides 72mg/dl, iron 8mcg/dl, transferrin 169 mg/dl

(NV=200-360), Vit B12 275 pg/ml (NV>250), albumin 3.4 g/dl. Blood gases were normal, and raised erythrocyte sedimentation rate of 90 mm in two hours, C-reactive protein 65 mg/dl (NV=0-5).

Serology for hepatitis B, C and HIV were all negative. Antinuclear antibody (ANA) was negative. c-ANCA (antineutrophil cytoplasmic antibody) and p-ANCA were within normal limits. Tumor markers and thyroid profile were all normal. Chest X-ray showed normal findings.

Abdominal CT scan revealed severe dilatation of the stomach and suspected obstruction at pyloric level, and marked thickening of the distal ileum. A barium swallow and follow through showed a markedly reduced emptying of the stomach and dilated stomach. Gastroscopy revealed a dilated stomach with pyloric stenosis and multiple superficial erosions, aphthous ulcers. Biopsy was performed. *Helicobacter Pylori* was negative. Colonoscopy revealed chronic active ileitis and colitis with superficial erosions and aphthous ulcers similar to the ulcers found in the pylorus. The diagnosis of CD was confirmed by histopathologic examination of the ileocolonic and pyloric biopsies. The patient was treated with TPN and a course of intravenous corticosteroids for two weeks followed by progressive tapering of oral corticosteroids over the next 6 weeks. A controlled gastroscopy after two months and another after two years demonstrate complete resolution of the stenotic lesion and good gastroscopic passage in addition a clinical improvement and weight gaining were noticed.

Discussion

CD is an immune-mediated inflammatory disease that can affect any portion of the intestinal tract from the mouth to the anus, though the ileum and cecum are the most common sites of infection. Gastritis and upper intestinal tract inflammation are present in 30 per cent of patients, while pyloric stenosis is a rare finding in patients with upper intestinal CD, especially adults patients. About one third of the patients with symptomatic gastroduodenal CD undergo surgery, most of them for (gastro-)duodenal obstruction. Gastroenterostomy with vagotomy is the surgical treatment of choice. Resection, strictureplasty or balloon dilatation can be performed in selected patients (2). Pyloric stenosis in an adult has various causes, but most reported causes were secondary to local disease such as exuberant healing of a previous gastric or duodenal ulcer, carcinoma, extrinsic postoperative adhesion, and bezoars (3-5). In our case all these causes were excluded, furthermore our patient did not have the classical symptoms encountered in CD, but endoscopic and histopathological findings (pyloric and ileo-cecal) compatible with CD. Few cases have been described in the recent literature about this association and in most of these cases the optimal treatment was surgery. In comparison, our patient was treated effectively with drugs in combination with TPN and was then symptom-free for two years.

Clinicians should be aware of the possibility that in young and middle aged adults such upper gastrointestinal symptoms as epigastric discomfort, vomiting and weight loss may occur as initial manifestation of CD or as extension of the disease other than a simple complication. Rapid diagnosis and immediate drug therapy including TPN, as in our patient, can sometime prevent unnecessary surgery. For these reasons we recommend carrying out panendoscopy and biopsies in all suspected patients.

References

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