

A Historical Megajejunum Due to Idiopathic Jejunal Stenosis

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Abstract: Jejunal strictures are rare and cause primarily problems of etiological diagnosis. They are often revealed by chronic presentation that depends on the nature of the stricture. Radiological investigations can locate the stricture and the etiological diagnosis that is most often inflammatory. Endoscopy plays a major diagnosis and therapeutic role with the advent of new technologies. We report a rare case of idiopathic jejunal stricture in a patient aged 28 years admitted for chronic vomiting. Radiology and enteroscopy described a mega jejunum. No specific etiology was identified. Surgical resection has removed the obstacle and the pathological study of the surgical specimen did not find any inflammatory or cancerous lesion. The patient improved clinically with no relapse with a follow up of 48 months.

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I. Introduction

Obstruction of the small bowel is a common mode revealing different pathologies of this organ. Jejunal damage remains rare and it is essentially a problem of etiological and therapeutic diagnosis.

Endoscopy plays a vital role thanks to the advent of new techniques. The etiologies are very diverse mainly due to inflammatory diseases. We report the observation of a rare case of idiopathic jejunal stenosis complicated by a historical mega jejunum diagnosed at the hepato-gastro-enterology department of University Hospital Hassan II.

II. Case Report

Mr. BM, 28 years old, was admitted to the hepato-gastro-enterology department for chronic vomiting. According to medical history, there was no particular drug intake, especially NSAIDs, no past or recent history of tuberculosis, no chronic inflammatory bowel disease or known vasculitis.

The history of his symptomatology started 18 months ago with postprandial bilious vomiting associated with diffuse abdominal pain and a weight loss of 13 kg.

The clinical examination showed a malnourished and dehydrated patient with a distended abdomen and an obvious fasting lapping without palpable mass or other abnormalities. There was no clinical tumoral syndrome.

The biological assessment found a hypokaliemia, hypochloremia, iron deficiency related anemia, with a moderate inflammatory syndrome.

Upper digestive endoscopy found significant dilatation of the duodenum with significant biliary stasis without visualization of any obstacle. There was no serological or histological signs of celiac disease or lymphoma.

The small intestine transit showed a mega jejunum upstream of a short probable benign jejunal stenosis (*figure 1*).

Enteroscopy revealed an aspect of mega jejunum with significant dilatation of the duodenum and the first jejunal loop upstream of an ulcerative stenosis of which 2 series of biopsies with immunohistochemistry were in favor of a nonspecific interstitial jejunitis.

An Abdominal CT showed an obstructive syndrome with huge distention of jejunal loops but without visualization of tumor causes (*figure 2*).

Ileo-colonoscopy was normal including the last ileal loop.

Given the probable benign cause of the stenosis, a hydrostatic endoscopic balloon dilation was performed in order to dilate the stenosis and to make biopsies at the level of the stenosis but it failed.

A surgical exploration was then performed objectifying the mega jejunum upstream of a very short stenosis of 1-2 cm at 30 cm from the angle of Treitz (*figure 3 and 4*). There was no suspicious tumor lesion, no lymphadenopathy or inflammatory pathology. Resection of the stenotic intestinal segment with end-to-end

anastomosis was performed. The results of anatomopathological study of the operative specimen returned in favor of non-specific edematous lesion.

Given the negativity of the etiological assessment, an idiopathic origin was selected. The evolution was marked by a resumption of a normal diet, a complete disappearance of the clinical symptomatology with weight gain with a follow up of 24 months.

III. Discussion

The small bowel is involved in 60 to 80% of cases of chronic or acute obstructions. Despite the progress of endoscopy and the knowledge of the pathophysiology of the small intestine, the diagnosis is often unknown for a long time^{1,2}.

Stenosis of the small intestine is defined by a constant and fixed reduction of the intestinal caliber. The normal size varies between 25 and 35mm, respectively for the ileum and the jejunum. For a stenosis to be symptomatic, it is necessary that the intestinal caliber be reduced by 25 to 50%³.

Clinically, chronic stenosis of the small intestine has an extremely variable expression depending on its location, its importance and especially its etiology^{4,5}. These lesions are often accompanied by hemorrhagic ulcerations, with possibility of anemia and melena or rectorrhagia. Transit disorders have variable intensity: late postprandial heaviness, Koenig syndrome, intestinal colic pain and finally occlusive or sub-occlusive syndrome³.

The clinical examination is marked by dehydration and undernutrition. In advanced forms, there can be abdominal distension⁶.

Diagnosis is based on computed tomography or MRI and double balloon enteroscopy. Opacification techniques can still have a place in some special situations⁷.

Chronic stenosis of the small intestine can be classified into six etiological groups. Inflammatory or infectious stenosis are by far the most common causes (symptomatic duodeno-jejunal Crohn's disease, intestinal tuberculosis, CMV enteritis, ...) ^{8,9}. Stenosis with vascular origin as part of the evolution of mesenteric ischemia can be seen in different vasculitis (Behçet, PAN ...), or after a trauma, and is often in the form of multiple and segmental ulcerative stenosis. Post-therapeutic, post-radiation (Ileum +++) or drug-induced stenosis (potassium salts in tablet form, chronic NSAIDs (fenamates, indomethacin, piroxicam) ^{4,8}. Tumoral stenosis that needs to be eliminated such as LMNH (ileo-coecum ++), epitheliomas (jejunum ++), stromal tumors and carcinoids ones and more rarely benign tumors. Some obstructions have endoluminal origin such as foreign bodies (bezoar, ileus biliary...) and finally the mesenteric and extrinsic stenosis including peritoneal hernias mesenteritis, carcinomatosis and extrinsic lesions. Ten percent of obstruction are idiopathic (case of our patient) ^{9,10}. The treatment depends essentially on the underlying etiology. In some cases, surgery is necessary to remove the obstacle and make the etiological diagnosis¹⁰.

The prognosis depends on the etiology.

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Conflict of Interests: None

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Figures:



Figure 1: Opacification transit showing Mega-jejenum and stricture

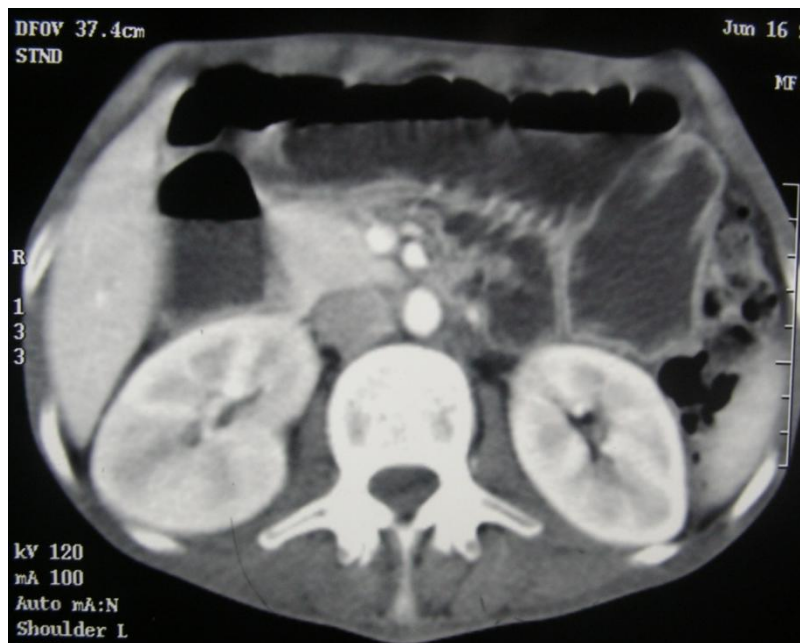


Figure2 : CT scan showing jejunal dilation

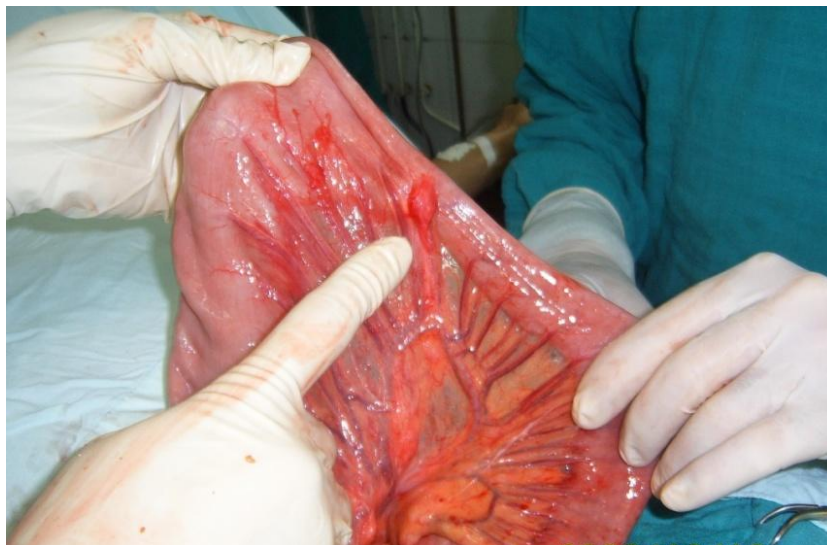


Figure 3 : per operative view of jejuna stenosis and size disparity of small intestine

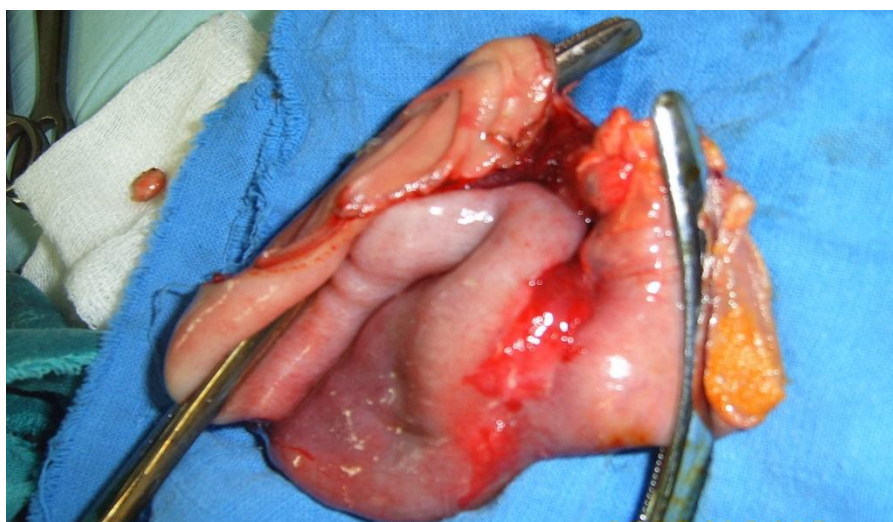


Figure 4: preoperative view of tricture after resection

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