Multiple giant diverticula of the foregut causing upper gastrointestinal obstruction

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INTRODUCTION

Multiple diverticulosis of the foregut is uncommon[1]. Although it is often asymptomatic, it can lead to severe complications, such as obstruction, hemorrhage, diverticulitis and perforation. Obstruction can be caused by inflammatory stenosis due to repeated episodes of diverticulitis, volvulus or intussusception, voluminous jejunal stones or dyskinesia of the small bowel[2-4].

We herein report a case of chronic gastrointestinal obstruction in a patient with a previous diagnosis of jejunal multiple giant diverticula.

CASE REPORT

A 49-year-old woman was admitted to our department, because of abdominal pain and vomiting together with a history of repeated episodes of obstructive gastrointestinal symptoms in the last two years.

In a previous diagnostic work out, she underwent contrast barium that showed multiple giant diverticula in the proximal small bowel tract (Figure 1).

At physical examination, she was dehydrated and her abdomen was distended but soft. A plain X-ray abdominal film showed distended small bowel loops and multiple gas-fluid levels.

The actual clinical condition, the long duration of symptoms and the previous diagnosis were all considered indications for surgery.

At the operation, diffuse giant diverticula were observed in the duodenum (Figure 2) and proximal jejunum so that duodenal diverticulectomy and jejunal resection were performed.

No postoperative complication was observed. During the 4-mo follow-up, the patient remained free of GI symptoms.

DISCUSSION

Jejunal diverticulosis is a rare entity with an incidence rate ranging from 0.3%-1.3% in autopsy series to 2.3% of radiographic findings[5].

Like colonic diverticula, small bowel diverticula other than Meckel's, are false diverticula resulting from mucosal herniation at the point where blood vessels penetrate the intestinal wall. This also explains their

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jejunal diverticulosis: a potentially dangerous entity.

In our patient, intermittent occlusive symptoms were probably caused by hyperdistension of the voluminous diverticula (Figure 2), resulting in external obstruction of jejunal loops.

Asymptomatic diverticula are found only in case of radiography or surgery performed for unrelated causes.

The diagnostic work up in symptomatic patients can start with plain abdominal X-ray film that could show distension of jejunal loops and gas-fluid levels into voluminous diverticula. Upper gastrointestinal X-ray study by barium contrast clearly shows the presence of multiple diverticula.

In case of acute abdomen due to diverticular perforation or intestinal obstruction, X-ray studies show typical signs of these conditions giving no information about the cause that will be recognized at surgery.

The treatment of choice for jejunal diverticulosis, often performed emergently, is resection of all the affected jejunum even in case of perforation or peridiverticular stenosis, in order to avoid further complications.

In case of obstruction due to an enteroith, some authors suggest conservative management by performing the manual breakage of all stones, intradiverticular and blocking ones, pushing their fragments to the colon.

This treatment is to be discouraged because of the persisting risk of stone formation and diverticular complications.

In contrast to jejunal diverticulosis, duodenal diverticula have been treated with simple diverticulectomy; The decision to operate a duodenal diverticulum, however, should be made with great caution because postoperative complications such as fistula formation and pancreatitis are not rare given the periampullary location of many of these diverticula.

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