



AN UNUSUAL PRESENTATION OF SIGMOID VOLVULUS IN YOUNG PATIENT-A CASE REPORT

General Surgery

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ABSTRACT

Sigmoid volvulus typically develops in patients of elderly age group with co-morbidities such as a psychiatric illness or a bed ridden patients. Recent reports suggest that it should also be considered in young individuals without any preceding medical history. Abdominal radiography is a cheap and effective diagnostic modality that can avoid a delay in diagnosis. The treatment of colonic volvulus remains controversial and relies upon the procedure selected and the most appropriate therapeutic approach in terms of the clinical status of the patient, the suspected existence or identification of peritonitis, bowel viability. Patients diagnosed radiologically prior to surgical intervention.

KEYWORDS

INTRODUCTION

Large bowel volvulus is an uncommon cause of bowel obstruction in the industrialized world (). Sigmoid volvulus occurs when the sigmoid colon twists axially around a long redundant sigmoid mesocolon, leading to a close loop of bowel that is at risk of strangulation, ischemia, gangrene, and perforation (.8). (FIGURE 1). Sigmoid volvulus is the most common cause of strangulation of the colon (). Sigmoid volvulus, which often develops during the 7th and 8th decades of life, has been reported in young people as well () Reported here an adolescent male patient with abdominal pain and obstipation and diagnosed as sigmoid volvulus.



CASE REPORT

A 17-year-old male presented with two days of abdominal pain along with nausea and obstipation. Two months ago, he suffered the same problem, but it was relieved by oral analgesics. On examination was afebrile. An abdominal examination revealed a distension with tympanic percussion. Bowel sounds were present. Plain abdominal radiography revealed the coffee-bean sign indicative of sigmoid volvulus () (FIGURE 2). A laparotomy was ultimately performed.



FIGURE 2

DISCUSSION

Large bowel volvulus is more prevalent in the developing world, where it constitutes nearly 50% of all bowel obstructions as compared to only 5% in the developed world. People consume more junk food, less fiber (vegetables and fruits), and even less water. In addition, hot

and humid weather leads to greater water loss from the body. Above all, a sedentary lifestyle is a leading factor for the development of sigmoid volvulus. Sigmoid Volvulus is more common in older patients, and especially those with a psychiatric co-morbidity (.15). Sigmoid volvulus is also seen in patients suffering from Parkinson's disease, Alzheimer's disease, pseudobulbar palsy, and chronic schizophrenia (). Acute fulminating volvulus, caused by complete obstruction, clinically presents as sudden onset of central abdominal pain accompanied by emesis and constipation. Gangrene and perforation are common early complications of this type of volvulus. With subacute progressive volvulus, patients have only a partial obstruction and more insidious onset. Older patients frequently have the subacute form. Plain abdominal X-rays are a rapid and useful diagnostic tool (.). It was reported that sigmoid volvulus was diagnosed with plain abdominal radiography alone in most of cases. In suspected cases, a barium enema is recommended both as a diagnostic and therapeutic tool. CT provides the additional advantage of excluding other causes of intestinal obstruction in uncertain cases and also facilitating diagnosis of complications, such as a perforation. Early diagnosis can prevent ischemia or perforation particularly in younger patients, in whom the chances of a misdiagnosis or a delayed diagnosis are higher (13).

A redundant segment of colon with a short mesentery and close proximity to the point of fixation to the segment are predisposing factors for the development of volvulus (). Torsion of the sigmoid colon occurs along its mesenteric axis and axial torsion occurs around the axis of the bowel, leading to volvulus. The ileo-sigmoid knot is a rare but serious abdominal emergency in which the ileum and sigmoid entangle each other to form a knot; this can lead to vascular compromise and gangrene of both the ileum and sigmoid colon. Venous congestion compromises the colonic blood supply, which occasionally aggravates venous infarction and gangrene. Although less common, involvement of the arterial blood supply can cause colonic ischemia.

The treatment of sigmoid volvulus remains controversial. It depends on the procedure selected depending upon clinical status of the patient, the location of the problem, the suspected existence or identification of peritonitis, bowel viability. Generally two surgical options are available. First, a single-stage procedure in which, initially, endoscopic derotation is followed by semi-elective sigmoidectomy and primary anastomosis. The second option is available when decompression fails and there are signs of colonic gangrene. This surgery is in two stages. In the first, a sigmoid resection and Hartman's procedure or a double-barreled colostomy is performed in order to avoid a high rate mortality with primary anastomosis in that situation. In the second stage 6-8 weeks later, Hartman's procedure is reversed or the colostomy is closed.

Presented here is a unconventional case of young male patient with cramping abdominal pain, of 2 days duration. symptoms were absolute constipation And obstipation for a couple of days with occasional vomiting. The diagnostic tool Used was simple abdominal

radiography. patient underwent Hartman's procedure .(FIGURE 3)



FIGURE 3

CONCLUSION

Acute sigmoid volvulus is a common differential diagnosis in older patients who are bed-bound or who have a psychiatric co-morbidity. This condition should also be included in the differential diagnosis of young patients with colicky abdominal pain and absolute constipation. The chances of a misdiagnosis or a delayed diagnosis are greater when the symptoms are mild and recurrent. Plain abdominal radiography is a simple, inexpensive, and widely available diagnostic tool that should be used to screen for this rare but serious condition.

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