

Acute Abdomen in A Mentally Retarded Patient—Sigmoid Volvulus

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Abstract

An acute sigmoid volvulus is an abdominal emergency needing urgent treatment and occurs due to torsion of the sigmoid colon around its axis. It is typically seen in patients belonging to an elderly age group with comorbidities such as psychiatric illness or bed-ridden patients. While the treatment of colonic volvulus remains controversial, approach depends on the clinical status of the patient, bowel viability and possible peritonitis.

Keywords: Acute sigmoid volvulus, sigmoidopexy, sigmoid colon.

Introduction

Acute sigmoid volvulus is the third most common cause of bowel obstruction. It usually occurs in the elderly patients in the age group of 56 to 75 years. The risk factors include chronic constipation, abuse of laxatives, diabetes, neurological disorders and previous abdominal surgeries.

It involves the sigmoid colon twisting axially about a long redundant sigmoid mesocolon, leading to a closed loop obstruction and hence increasing the chances of development of strangulation, ischemia, gangrene and perforation. Colonoscopic detortion represents a safe and efficient treatment in stable patients. However, when it is unsuccessful, or in case of life-threatening complications such as peritonitis, bowel ischemia, gangrene or perforation, emergency surgery is required.

Case Report

Here, we report the case of a 52-year-old male patient with mental retardation, who presented with severe abdominal pain and constipation for two days. Patient also complained of abdominal distention, vomiting and obstipation for one day. A plain abdominal x-ray demonstrated distended left colon with the pathognomic ‘Coffee Bean’ sign suggestive of sigmoid volvulus. CT scan of the abdomen revealed a closed loop obstruction with twisted loop of sigmoid colon and no signs of perforation.

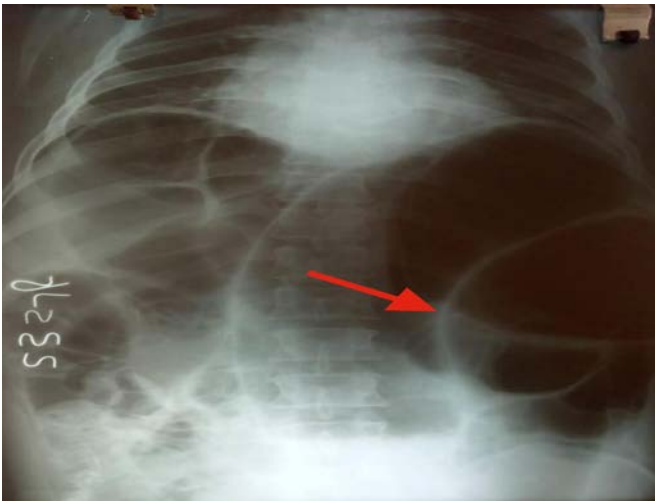


Figure 1 : Erect X-Ray abdomen exhibiting 'Coffee bean' sign suggestive of torsion of bowel.

Taking into consideration the patient's physical condition, laboratory and radiological investigations, emergency laparotomy was performed. The intra-abdominal exploration revealed torsion of the sigmoid colon; detorsion was performed.

A flatus tube was passed in the operation theater under adequate care and decompression of the bowel was done successfully. Hence a sigmoidostomy was not required. After ensuring bowel viability, sigmoidopexy was performed. Post-op period was uneventful and the patient was discharged on the fourth post-operative day. He has been followed up for 6 months now, on out-patient basis, and remains in a good state of health without any symptoms.

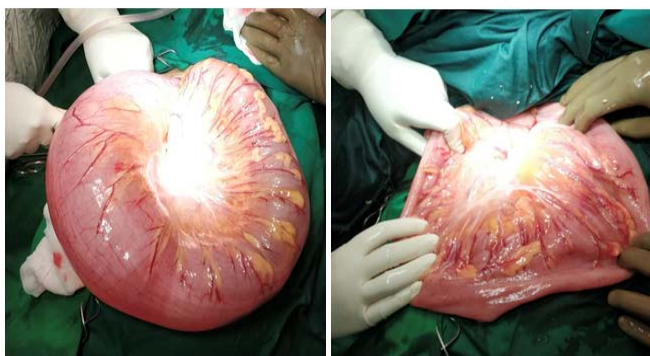


Figure 2: Dilated large intestine after sigmoid volvulus is derotated and then deflated using flatus tube.

Discussion

Colonic volvulus is the third most frequent cause of colonic obstruction in developed countries, only to be preceded by cancer and diverticular disease.²

The most common symptoms are abdominal pain with distention, obstipation and vomiting. If the intestinal vitality is disturbed, signs of peritoneal irritation get added to that picture. From a clinical perspective, a CT scan may be unnecessary, since a plain x-ray is diagnostic in 57-90% of the cases with a characteristic "coffee bean" sign, while in an abdominal CT, the characteristic "whirl" sign can be visualized.^{3,4}

Conclusion

Although sigmoid volvulus is rare, it must be taken into consideration in the differential diagnosis of patients with colonic obstruction symptoms. Successful treatment depends upon early diagnosis and timely intervention. The success rate of detorsion by colonoscopy is as low as 12.5%. Resection, sigmoidopexy, sigmoidopexy with sigmoidostomy can be used as surgical management to reduce recurrence rates.⁵

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