

A case report of abdominal sponge in ileum in a patient with intestinal obstruction

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Abstract

A 36-year-old woman presented in the emergency department of East Surgical Ward of MAYO Hospital Lahore, Pakistan, in August 2019 with complaint of abdominal pain and vomiting for the past five days. The patient had a history of three Caesarean sections, the last one three years back. Off and on, she experienced abdominal pain and distension which was relieved after taking local medicines. She had no comorbid conditions and her baseline investigations were normal. On examination she had tachycardia with pulse 110/min and her whole abdomen was tender with exaggerated bowel sounds. X-ray of the abdomen showed multiple air fluid levels in the small intestine. Exploration plan was made; a distended segment of ileum was later found to have an abdominal sponge inside its lumen. There was a perforation in the ileum through which the sponge was retrieved and resection and end-to-end anastomosis was done. The patient was discharged on third post operation day.

Keywords: Intestinal obstruction, Intraluminal sponge, Gossypiboma.

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Introduction

It is commonly known that foreign materials like surgical instruments, and sponges are accidentally left in the abdominal cavity as many cases have been reported in different countries.¹ The term Gossypiboma refers to retained surgical gauze or other surgical instrument in the abdominal cavity. It is an important surgical complication and can later prove fatal.² Gossypiboma may manifest with different gastrointestinal and general presentations depending on the site of the retained sponge in the abdomen.³ Despite many standard policies for counting of surgical sponge and instruments, retained surgical foreign body still maintains a substantial challenge for patient's safety. Diagnosis is often delayed in these cases

and medico legal issues further complicate the problem.⁴

Although it is common to find gauze in the abdominal cavity once it is left in the previous operation, the migration of abdominal gauze or sponge inside the lumen of the small intestine is still a mystery.⁵ Only one or two case reports show extraction of sponge from inside of the lumen of small intestine, especially in cases where previous abdominal surgery had not involved any intervention on the gut.³ In this case report we present the case of a female patient who had Caesarean section three years back; she now presented to us with abdominal pain and vomiting. On exploration an intraluminal gauze was retrieved from the patient.

Case Report

A 36-year-old woman presented in the emergency department of East Surgical ward of MAYO Hospital Lahore, Pakistan in August 2019 with chief complaints of abdominal pain and vomiting since the past five days. She had no comorbidities and had a history of three caesarean sections, last one three years back. Since three years she had pain in the abdomen, abdominal distension, off and on vomiting and constipation but all these symptoms



Figure-1: Extraction of sponge from the ileum.

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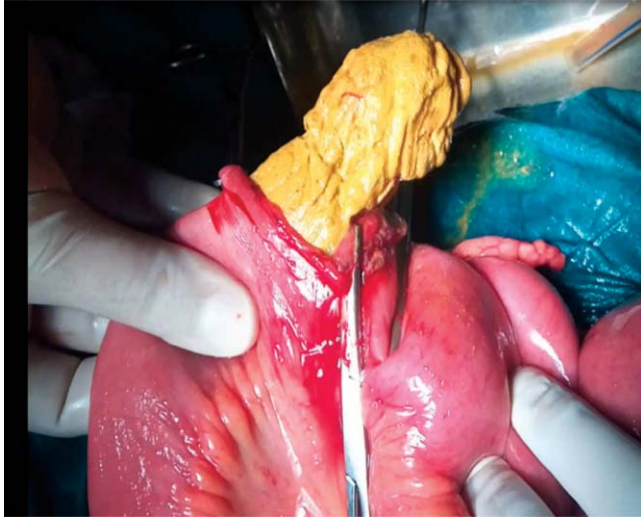


Figure-2: Removing sponge from the ileum.



Figure-3: Extracted full abdominal sponge from the ileum.

would get relieved on taking medications from a local doctor. The symptoms used to aggravate especially after taking large meals. To avoid these discomforts, she preferred to take semi solid, mostly liquid diet at small intervals. But since the past five days those symptoms were not relieved and abdominal distension kept on increasing, later accompanied by bilious vomiting. She had been taking only sips of water for the past five days. On examination her pulse was 110/min with normal blood pressure and respiratory rate. The abdomen was tender in hypogastrium with exaggerated bowel sounds. Chest X-ray was normal and abdominal X-ray showed multiple air fluid levels. After keeping the patient on conservative measures for a few hours, the diagnosis of Adhesion obstruction was made and the patient was shifted to the emergency operation theatre after taking

written informed consent. Under general anaesthesia, the abdomen was opened via midline umbilical saving incision. On opening the abdomen, the omentum was found stuck on the uterus with interloop adhesions of ileum. The omentum was detached from the uterus. The uterus wall was healthy and smooth with no signs of perforation and there were no adhesions between ileum and uterus. There was a small perforation in the adhesions of ileum with distended proximal jejunum and ileum. There was minimal spillage of ileal contents in the peritoneal cavity. After adhenolysis and identification of the perforation which was two feet proximal to ileocolic junction, while attempting to empty the small gut, a hard feeling was encountered inside the distended part of the ileum which was initially considered as bag of worms, but while moving towards perforation it turned out to be an abdominal sponge (Figure-1 & 2). It was 40cm×40cm in size rolled on itself and covered with small gut contents (Figure-3). The sponge was removed and the perforated segment was resected and end-to-end anastomosis was performed in single layer extra mucosal technique with Vicryl 3/0. Abdominal drain was placed and the abdomen was closed with Prolene 1 continuous suture. The patient was shifted to the ward, the drain was removed on the second post-operative day and sips of water were allowed. She was discharged from the ward on the third post-operative day.

Discussion

Although in literature, Gossypiboma is a well-known term and many cases have been reported where abdominal gauze/sponges or surgical instruments were found inside the peritoneal cavity, which were left during previous operations.⁶ But finding a sponge inside the lumen of the gut is a very rare scenario.⁷ There are only two entries inside the alimentary canal, oral cavity and anus. It is unlikely to introduce abdominal sponge through both these routes. Although a rare psychiatric condition called trichobezoar exists, where the patient pulls and eats hair. Hairs being small in size and easily swallowable, abdominal sponges can't be swallowed due to its large size. So, this leaves a second option in which the sponge was left in the abdominal cavity and it transmigrated into the bowel. The mechanism of this transmigration is a mystery as no intervention on bowel was done and the wall of small gut was absolutely normal. It seems unbelievable for the small intestine to engulf the sponge without causing perforation and peritonitis. Another possibility is that the sponge was left in the uterus with bowel perforation and after ileal adhesions the sponge entered the lumen of the intestine. CT scan of the abdomen pre-operatively could have detected the presence of an intraluminal gauze but being a very rare cause of obstruction and limited facilities

available, CT scan could not be performed. It is also not possible to be used as an investigation in every case of intestinal obstruction. The surgery plan in any case would not be changed.

Conclusion

The mechanism of migration of a sponge from the peritoneal cavity into the lumen of small intestine is a mystery and it needs further research as to how this transmigration occurred with an intact gut wall. There is no other source recognisable for the entry of sponge into the alimentary canal.

Patient Consent Form: The patient's consent was obtained for publishing this case report.

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