

Case Report

Bolus ileus-an occasional cause of small bowel obstruction-case report

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ABSTRACT

A food bolus can be an occasional cause of small bowel obstruction. Especially older and senile patients are at higher risk for developing a bolus ileus. Certain pathological conditions are associated with a higher risk for developing a bolus ileus, such as duodenal and small bowel diverticula. In this paper is presented a case of a 68-year-old female patient with food bolus, that caused a mechanical small bowel obstruction. The abdominal computed tomography scan before surgery did not show the precise cause of intestinal obstruction. During surgery we found a big grape in the distal ileum, which was removed through enterotomy. Further postoperative course was uneventful.

Keywords: Bolus ileus, Exploratory laparotomy, Intestinal obstruction, Small bowel

INTRODUCTION

Small-bowel obstruction (SBO) is caused by a variety of pathologic processes. The most common cause of SBO in developed countries is intra-abdominal adhesions, accounting for approximately 65% to 75% of cases, followed by hernias, Crohn disease, malignancy, and volvulus. SBO in developing countries is primarily caused by hernias (30-40%), adhesions (about 30%), and tuberculosis (about 10%), along with malignancy, Crohn disease, volvulus, and parasitic infections. The general trend in developing countries is an increased incidence of SBO from adhesions, with a higher incidence of laparotomies.¹ Occasional cause of SBO can be an ingested foreign body, which most commonly sticks in the distal ileum.² SBO usually requires a surgical management.³ The benefit of surgical treatment should be balanced with the risks associated with surgery, patient's co-morbidities, and presence or absence of strangulation. Based on the best available evidence it could be argued that surgical intervention could be preserved for cases with high suspicion or evidence of bowel strangulation.⁴ In this paper is presented a case of a 68-year-old female

patient with SBO, caused by an ingested fruit-a big grape (Figure 1).

CASE REPORT

68-year-old female patient was referred to our department from internal clinic because of small bowel obstruction, shown on abdominal computed tomography (CT) (Figure 2). Before that she was admitted to the internal clinic because of nausea, vomiting, lack of appetite and general bad condition. Abdomen became distended and painful on palpation, she did not pass any stool or flatus. She also had an umbilical hernia, which was not incarcerated and could not be the cause of ileus. Abdominal CT was performed, which showed dilated jejunum and collapsed ileum, suspicious for a small bowel obstruction between jejunum and ileum. The precise cause of small bowel obstruction could not be determined with abdominal CT. We decided to perform an exploratory laparotomy. During surgery we found a mechanical small bowel obstruction. The cause was a food bolus, which stucked in the distal ileum. We were not able to break down the bolus or milke it down through the ileocaecal valve, so

we had to perform an enterotomy and remove the bolus. It turned out to be a big grape (Figure 1). Then we closed the enterotomy with a resorbable suture, an abdominal drain was inserted, and laparotomy closed with slowly resorbable interrupted sutures. Skin wound was closed with staples. The postoperative course was uneventful. On the 11th postoperative day she was discharged from hospital.



Figure 1: Ingested fruit-a big grape, that caused a mechanical SBO and was removed during surgery.



DISCUSSION

Intestinal obstruction from impaction of a food bolus is a well-documented, though unusual phenomenon associated with a significant morbidity and an operative mortality of up to 5%. In some reports it accounts for 4% of simple small-bowel obstruction. Elderly, often senile patients, patients with no teeth and patients after partial gastrectomy are at a particular risk for developing a food bolus intestinal obstruction. Certain pathological conditions are associated with a higher risk for developing a bolus ileus, such as duodenal and small bowel diverticula. The site of impaction in bolus obstruction is usually the distal ileum approximately 100 cm from Bauchini valve. At this site the bowel lumen is narrowest, and the peristaltic activity is most sluggish. The obstruction may also occur elsewhere in the bowel, including the sigmoid colon and rectum.⁵

The clinical picture can be nonspecific as the symptoms of intestinal obstruction are common to a variety of problems. Symptoms can include severe abdominal pain, cramps that come in waves, bloating, nausea and vomiting, diarrhea, constipation or inability to have a bowel movement, inability to pass gas, distention or swelling of the abdomen, loud noises from the abdomen and foul breath.³ Conventional radiographs remain the first line of imaging. CT is used increasingly more because it provides essential diagnostic information not apparent from radiographs. MRI may play a role in the future as technology improves and it becomes more readily available. If an acute obstruction is suspected, CT is the technique of choice for several reasons. First, it does not require oral contrast material because the retained intraluminal fluid serves as a natural negative contrast agent. Second, when compared with enteroclysis, CT is rapid, noninvasive, and readily available. Finally, it also allows extramural areas that would not be visible on contrast studies to be assessed.⁶

The manner in which the bolus obstruction is relieved depends largely on the circumstances prevailing at surgery; if the bolus cannot easily be broken up by palpation and milked down through the ileocaecal valve, an enterotomy must be performed. It is extremely important to palpate the rest of the bowel to exclude any other cause of obstruction.⁵

Our patient had a big grape, stuck in the distal ileum. Abdominal CT before surgery did not show the precise cause of obstruction. On exploratory laparotomy we found the cause of mechanical small bowel obstruction. We could not break down the bolus or milk it down through the ileocaecal valve, so we had to perform an enterotomy.

CONCLUSION

Small bowel obstruction with food is known, but rare cause of intestinal obstruction. The diagnosis is not always straightforward and even the CT does not always show the precise cause of intestinal obstruction. Many times, the correct diagnosis of bolus ileus is set up during exploratory laparotomy. The surgeon must keep in mind, that bolus ileus can be a possible cause of intestinal obstruction, especially in older and senile patients.

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