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Case Report

Watch out what you eat: Unexpected cause of Mechanical Intestinal Obstruction in a Young Male, Case- Report and Literature Review.

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Abstract

Mechanical small bowel obstruction in virgin abdomen is becoming more frequent due to several causes. We present a case of 22 years old male patient with colicky abdominal pain associated with 2 days of constipation. Radiological imaging showed dilated small bowel loops with transition point. After proper resuscitation and stabilization, patient underwent diagnostic laparoscopy and undigested food particles were retrieved through enterostomy. Patient had uneventful recovery and discharged home with outpatient follow up.

Introduction:

The causes of mechanical intestinal small bowel obstruction in a virgin abdomen are usually challenging. Recently, a vegetable or undigested food causing complete small bowel obstruction are increasing and it is a rarely documented in the literatures (1). The bolus can pass spontaneously or dissolved by GI enzymes, however, unusually, the remnant of large amounts of squid particles can remain undigested and it can cause mechanical intestinal obstruction like in our case scenario. Treatment is surgical exploration, either laparoscopic or open.

Case Presentation:

A 22-Years-old male patient with no previous history of chronic illness or abdominal surgeries, who presented to emergency clinic with central colicky abdominal pain, abdominal distention, bilious vomiting for 3-days' duration and constipation for 2-days. No fever, weight loss or loss of appetite, and no others GI symptoms. On examination: He was ill, dehydrated, Blood pressure of 100/60 mmHg, Pulse rate of 112 Peat/Minute, abdomen was distended, mildly tender with increased bowel sounds and per rectal examination revealed empty rectum. X-ray abdomen showed small bowel dilatation and air fluid levels. CT abdomen showed, proximal small bowel loop dilatation (52 mm) at proximal ileal loop, transition point distended with fecal matter, distal ileal and colon were collapsed, impression was mechanical intestinal obstruction likely adhesions. **(figure.3)**

Laboratory investigations were unremarkable. Patient was taken for diagnostic laparoscopy after stabilization of his condition, the finding was, proximal small bowel dilatation up to distal ileum with hard transition point about 50 cm from ileocecal valve with distal collapsed ileum and colon. Transition point delivered out through small RIF Lanz incision and entrotomy finding are, thick undigested food particles (squid particles) causing mechanical intestinal obstruction. **(figure 1&2)** Primary repair was done for entrotomy site, patient did well and discharged home after 3- days of hospital admission in a good condition.

Figure.1. squid remnant

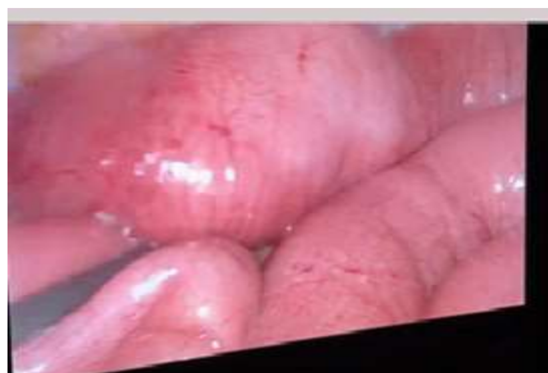

Figure.2. intraluminal foreign body

Discussion:

The cause of mechanical small bowel obstruction in a virgin abdomen specially in young patient can be challenging and usually will need for surgical intervention. (1)

Exact cause is usually not reached preoperatively especially if it is due to remnant of food particles especially squid component as it can be mimic with fecal matter radiologically as in our patient.

Some report suggests that 4% of the etiology of small bowel obstruction are due to undigested bolus or bezoar. (2)

Risk factors includes elderly patients with no teeth, previous gastric surgery and small bowel diverticula. (3), our patient has not any of these risk factors.

Abdominal x-ray is initial simple investigation for diagnosis of small bowel obstruction although finding of undigested food remain difficult to be detected (4).

CT scan is gold is investigation of choice for confirmation of diagnosis and it can also have rolled out other cause of intestinal obstruction, however, it neither specific nor sensitive to reach diagnosis in our case study. (5.6)

Surgical exploration is treatment of choice and relive obstruction is main gall as the morbidity and mortality reaching 5% if left untreated. (7)

Conclusion:

Squid particles can cause mechanical intestinal obstruction with significant morbidity.

Radiological investigation can be nonspecific to detect exact cause of high output small bowel obstruction.

Surgical intervention should not be delayed if the cause is not reached preoperatively specially in a complete small bowel obstruction.

Diagnostic laparoscopy/ Laparotomy remains best option for intervention and management.

Statement of Ethics

The case report was sent to the hospital Ethics Committee and they approved for publication.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

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References

1. Davies DG, Lewis RH. Food obstruction of the small intestine: a review of 15 cases. Br Med J (1959): 545-548.

2. Bevan P. Acute intestinal obstruction in the adult. Br J Hosp Med 28 (1982): 258-265.2.

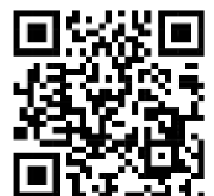
3. Janež J. Bolus ileus-an occasional cause of small bowel obstruction-case report. International Journal of Research in Medical Sciences 5 (2017): 5447.

4. BOWEN FH: Obstruction of the small bowel due to boli of ingested coconut: a report of two cases. Am Surg 22: 1076, 1956.

5. Knott-Craig CJ, Du Toit DF, Van Schalkwyk P, et al. Bolus obstruction of the intestine. Case reports. S Afr Med J 67 (1985):1025-1026. 11. Smerieri N, Barbieri I, Fumagalli M, et al. A rare cause of mechanical bowel obstruction: ingested vinyl glove. Unexpected diagnosis at laparoscopy. Clin Case Rep 5 (2017): 1026-1027.

6. Smerieri N, Barbieri I, Fumagalli M, et al. A rare cause of mechanical bowel obstruction: ingested vinyl glove. Unexpected diagnosis at laparoscopy. Clin Case Rep 5 (2017): 1026-1027.

7. Davies DG, Lewis RH. Food obstruction of the small intestine: a review of 15 cases. Br Med J 2 (1959): 545-548.



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