

Candy Like Bezoar : as a Rare Cause of Intestinal Obstruction and Perforation in 18 –Months Old Girl

Case Report
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Abstract

Summary: 18 old months female child presented to Fallujah Hospital with intestinal obstruction and perforation due to eating a candy like indigestible balls, the child underwent three complicated operations as a result of this mistake

Key words: Bezoars- Intestinal obstruction- Perforation.

Introduction :

Bezoars are collections of non digestible materials ,usually of vegetable origin (phytobezoar) but also of hair (trichobezoar)⁽¹⁾. Bezoars can also be classified to four types, phytobezoar, trichobezoar, lacto bezoars and medication and food bolus bezoars. most bezoars form in the proximal gastrointestinal tract mainly in the stomach, causing different symptoms like dyspepsia ,bloating ,nausea ,vomiting ,dysphagia and even upper GIT bleeding. However the most dangerous complication is small bowel obstruction ,Gastritis or gastric ulcer which may lead to perforation⁽²⁾.

Phytobezoars are the most common type of bezoars associated with small bowel obstruction and the reported incidence being 0.3 to 6% ⁽³⁾. I have report unusual case of an 18 month child with an obstruction and perforation of terminal ileum due to eating of candy like solid balls became soft ,large and attractive when immersed with water for a while fig(1).



fig(1) samples of toys

CASE REPORT :

18-months old female child visit the emergency room complaining of vomiting and abdominal distention for more than 36 hours as her mother say, the vomiting was bile stained ,the condition associated with continuous crying, inability to sleep, and passing small stool with mucus and blood, the child seen by pediatrician and admitted to the ward as a case of

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gastroenteritis, the condition of the child deteriorate and the pediatrician consult the surgeon on call 15 hours after admission.

On examination, the child looks ill, dehydrated, her NG-tube shows a bile stained fluid, weight 9.5 kg, pulse rate 130/min, temp 38.3°C, resp rate 35 / minutes, diffuse abdominal distention, tenderness all over the abdomen, bowel sound is sluggish, PR-rectum containing a red currant jelly like. Auscultation of the chest reveals systolic murmur due to VSD. Abdominal x-ray showed multiple air fluid levels, fig(2), PCV was 32%, WBC 12700/cc, bl-urea 35mg/dl, s-K⁺ 3.3mmol/L, S-Na⁺ 135mmol/L, s-CL⁻ 98mmol/L, urine analysis was normal.



fig(2) X-ray findings multiples air-fluid levels

Resuscitation of the child done with intravenous fluid, foley's catheter and 500mg cefotriaxone. preparation of the patient for emergency laparotomy for acute intestinal obstruction mostly intussusceptions, Explorative Laparotomy under general anesthesia through midline incision reveals fecal peritonitis, dilated loops of small bowel, collapsed large bowel, the last 20 cm of ileum was red edematous, fibrinous adhesion, with large two perforations one perforation close to ileocecal valve, different size and colors masses of jelly like in the peritoneum and inside the lumen, inflamed mesentery with multiple large mesenteric lymphadenopathy, ileocecal resection done with end ileostomy, fig(3).



Fig. (3)laparotomy with ileostomy

On questioning the parents about that contents in the bowel ,they mention that the child play with his brothers with some toys and some time eat these toys after emerged in water and became soft. the family brought us sample of these toys which are small, different colors ,sizes and shapes solid balls which became large ,soft ,attractive and look like candy or chocolates ,it's very cheap and available in all supermarkets and even in small shopping centers . Post operative the child developed intraabdominal abscess nesses ate exploration and drainage after two weeks . The specimen of the bowel and contents send for histopathology and the result was sever serositis and lymph node hyper plasia (non-specific inflammatory process).

After two months ilioostomy closed by end to end ilio-colic anastomosis ,the child discharged in the 7th post-operative day without complications fig(4).



Fig. (4) patient 8 weeks after ilioostomy closure

Discussion:

Children usually have the desire to eat anything which appeared colored ,attractive like normal candy and chocolate, my patient facing these toys and eat a lot of it.

These substances usually used by some family as an attractive materials after collect a different shape and colors in a glass container and immersed in a clear water ,so it became large and more attractive and they keep on the counter or anywhere at home.

These materials accidently reach the children and causing the rare small intestinal obstruction and delay diagnosis causing perforation in my patient.

The mechanism of obstruction may be similar to some phytobezoars obstruction ,citrus fruits pits are recognized cause of small intestinal obstruction especially if ingested unpeeled, both tangerines and oranges are citrus fruits ,tangerines are smaller very easily peel and much sweeter.

The envelope of each pits are rich with cellulose fiber which undigested, tend to absorb water, reconstitute and swell in the intestine ⁽⁴⁾.

Many citrus fruits like persimmons contain phlobitaninin (shiboul),which in the presence of gastric hydrochloric acid form a coagulum, the sticky coagulum of undigested cellulose fiber entrapped the pits accumulated in the terminal Ilium , the small diameter and weak motility of the terminal Ilium is believed to contribute to illus in such cases⁽⁵⁾.

Children who present with acute intestinal obstruction for the first time without any previous history of abdominal pain or surgery, a differential diagnosis of bezoars obstruction

has to be considered and good dietary history should be taken to reach the proper diagnosis at the earliest⁽⁶⁾ .

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