

An Interesting Case of Sunflower Seeds Causing Fecal Impaction

Spoorti Sarode MD; Christopher Andrade MD; Hilary Hertan MD, FACG

INTRODUCTION

Bezoars are collections of indigestible foreign material accumulated and conglomerated in different locations throughout the gastrointestinal tract. Seed bezoars are a subcategory of phytobezoars, and are the most common among the gastrointestinal bezoars. Seed bezoars in the rectum have been considered an uncommon cause of fecal impaction in adults(2)(3). In this case report, we present a case of fecal impaction due to sunflower seeds, in an otherwise healthy adult patient.

CASE DESCRIPTION

A 29 year old male from the community with a past medical history of HLD, GERD presented to the ED for evaluation of abdominal discomfort, rectal pain and urinary retention. He endorsed eating a whole bag of sunflower seeds with the peel one day prior to presentation. Physical exam was significant for suprapubic tenderness. Labs were grossly unremarkable. CT abdomen and pelvis showed cholelithiasis, a moderately distended rectum with stool without bowel obstruction. Patient underwent flexible sigmoidoscopy which revealed phytobezoar in rectum (figure 1) and recto sigmoid colon. Phytobezoar was partially removed during the procedure with sterile lavage, a Roth net and use of a suction catheter (figure 2). Post procedure, mineral oil enema was used for further removal of the phytobezoar. The patient's symptoms resolved completely and he was discharged two days later.

DISCUSSION

Bezoars are collections of indigestible foreign material accumulated and conglomerated in different locations throughout the gastrointestinal tract, however, they are most commonly found in the stomach. Bezoars are divided into four groups according to their combination, including phytobezoars, trichobezoars, pharmacobezoars and lacto bezoar(1). Among the four types of bezoars, phytobezoars are the most common(2). Of the different seed types causing bezoars, watermelon seeds comprised the majority (54%) followed by sunflower seeds (21%)(3).



Figure 1. Phytobezoar in rectum.



Figure 2. Phytobezoar after removal.

Bezoars from fruits and vegetables tend to accumulate in the stomach, however, seed bezoars, due to their small size, pass the pylorus more easily and tend to form an impaction either in colon and rectum. The diagnosis of seed bezoars is based on careful history and digital rectal examination. However, imaging scans help physicians to diagnose seed bezoar in the small intestine and colon which require further investigations. The most frequently seen CT findings of bezoars include the appearance of a round or ovoid or a long sausage-shaped mass containing mottled gas at the obstructed site(4).

Treatment and evacuation of phytobezoar is based on its location in the gastrointestinal tract. The currently available treatment options for phytobezoar include dissolution of the bezoar by Coca-Cola®, papain, cellulase, removal by endoscopic devices, laparotomy, and laparoscopic surgery.

REFERENCES

- 1. Iwamuro M, Tanaka S, Shiode J, Imagawa A, Mizuno M, Fujiki S, et al. Clinical characteristics and treatment outcomes of nineteen Japanese patients with gastrointestinal bezoars. Intern Med. 2014;53:1099–105].
- 2. Ladas SD, Kamberoglou D, Karamanolis G, Vlachogiannakos J, Zouboulis-Vafiadis I. Systematic review: Coca-Cola can effectively dissolve gastric phytobezoars as a first-line treatment. Aliment Pharmacol Ther. 2013;37:169–173.
- 3. Iwamuro M., Okada H., Matsueda K., et al. Review of the diagnosis and management of gastrointestinal bezoars. World Journal of Gastrointestinal Endoscopy . 2015;7(4):336–345. doi: 10.4253/wjge.v7.i4.336.
- 4. Imaging differentiation of phytobezoar and small-bowel faeces: CT characteristics with quantitative analysis in patients with small-bowel obstruction. Chen YC, Liu CH, Hsu HH, et al. *Eur Radiol.* 2015;25:922–931

CONTACT

Spoorti Sarode, MD
Montefiore Medical Center,
The University Hospital for
Albert Einstein College of
Medicine
Email: ssarode@Montefiore.org
Phone: (718) 795 5814