

Seed Shells and Intestinal Obstruction: An Unusual Etiology for Rectal Impaction in a Young Adult

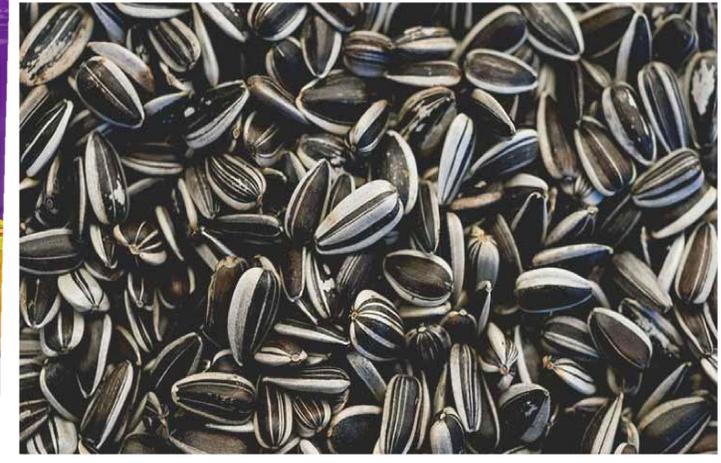
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Introduction

- Bezoars are a retained mass of ingested indigestible foreign material that may cause obstruction at different locations in the gastrointestinal tract. Bezoars consist of hair (tricho-bezoar), vegetable matter (phyto-bezoar), undigested milk concretions, (lacto-bezoar) or medications (pharmaco-bezoar).
- We report a case of a young adult who presented with an unusual phyto-bezoar.

Case Presentation

- A young adult physician, with no prior health issues presented to the emergency department with lower abdominal pain, constipation and difficulty urinating since one day.
- Pain was centered at the suprapubic region, was non-radiating and worsened with attempts at defecation.
- While engrossed in computer related work for hours, he had consumed a whole bag of shelled sunflower seeds with barely any water that day.
- He reported normal stools a day earlier, followed by loose stools along with abdominal discomfort and severe rectal pain on trying to defecate.
- Glycerin suppositories and tap water enema were tried without relief. He also had a distended urinary bladder. Foley insertion drained up to 800ml of urine.
- Rectal examination revealed a hard mass impacted in the rectum. Under sedation, flexible sigmoidoscopy revealed a seed phyto bezoar in the rectum and recto-sigmoid colon.
- Removal was partially accomplished with a Roth net, sterile water lavage and suction catheter.
- Post procedure, a bowel regimen was initiated, oral fluids encouraged and mineral oil enema given. The regimen helped evacuate the rest of the bezoar through small frequent bowel movements and intermittent disimpaction.

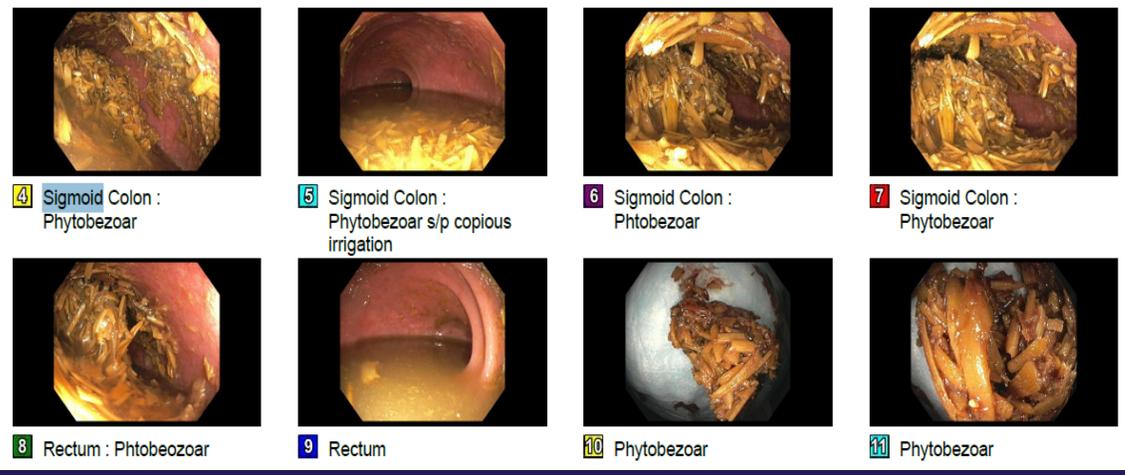
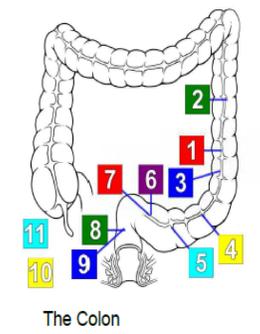


Discussion

- Sunflower seeds are a good source of mono and polyunsaturated fat, protein and fiber, and are a boost to heart health.
- Seed bezoars, one of the phyto-bezoars, consist of undigested plant or fruit seeds that have a tendency to accumulate in the rectum of patients who may not have any predisposing conditions.
- Due to their small size, they easily pass through the pylorus and the ileocecal valve, gradually forming a conglomerate in the colon. On reaching the rectum, the mass gets further dehydrated and hardened, as much water is absorbed in the colon; this eventually predisposes to impaction.
- The result may be severe constipation or obstipation, abdominal and anorectal discomfort, and urinary retention as a result of extrinsic pressure.
- Several neural pathways are common to both bladder and the colorectal regions.
- A focused history and digital rectal exam confirm the diagnoses in most cases.
- Enemas and suppositories barely relieve the impaction; sigmoidoscopy and colonoscopy are usually required to aid disimpaction.
- Although fiber is recommended as a heart healthy diet, inadequate ingestion of water predisposes to constipation in these individuals.

SIGMOIDOSCOPIC FINDINGS

Images:



Conclusion

- Sunflower seeds are an unusual cause of phyto-bezoars that may cause rectal impaction, especially in the setting of poor fluid intake
- Conservative measures often fail to relieve seed phyto-bezoar impaction; endoscopic interventions may be required.

References

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