CLINICAL VIGNETTE

Sunflower Seeds, Bezoars & The Operating Room

Sami I. Zakzook, M.D.
Rumi R. Cader, M.D.

Case Report

A 43-year-old man with no significant past medical history presented to the emergency room (ER) complaining of constipation, abdominal pain and severe rectal pain. His last bowel movement was 6 days prior and he felt that his problem started with abdominal discomfort after eating 2 large bags of whole sunflower seeds. The patient works as a long-distance truck driver and snacks during his drives. Over the past week he had consumed 2 large bags of whole sunflower seeds during a long drive. He swallowed handfuls of sunflower seeds without chewing them. He unconsciously did this as he was driving long-distance with nothing else to do but snack on sunflower seeds. He reported mild constipation before consuming these sunflower seeds, but it was never as severe. He complained that he felt like he needed to have a bowel movement but had severe rectal pain every time he tried to defecate.

On examination, the patient was in obvious distress secondary to rectal pain. His temperature was 97°F, pulse 65 beats/min., blood pressure 127/87 mmHg, respiratory rate of 16 breaths/min. and pain level of 10/10. Lung and heart examination were normal. His bowel sounds were normal in all 4 quadrants and his abdomen was soft with mild suprapubic tenderness to palpation. There was no guarding or rebound. Rectal examination was extremely painful with a palpable ball of seeds moving up and down within the rectal vault. Computed tomography (CT) scan of abdomen and pelvis revealed mild dilatation of the large bowel to the level of the anus, with a suggestion of subtle perianal/perirectal fat stranding consistent with proctitis.

The patient was diagnosed as having a fecal impaction and proctitis secondary to a rectal bezoar consisting of sunflower seeds. In the ER multiple treatments were tried to relieve the impaction, including enemas, Electrolyte with peg-oral and magnesium citrate. Unfortunately, these only led to liquid seepage around the rectal bezoar but no passage of solid stool or sunflower seeds. Mineral oil enemas were also attempted without success at resolving the fecal impaction. The patient was admitted from the ER to the medical ward team. More enemas and manual disimpaction were attempted, however the patient could not tolerate any manipulation of the bezoar due to severe rectal pain. Gastroenterology scheduled the patient for a flexible sigmoidoscopy on the following day and general surgery was consulted. Both the medicine and surgical teams felt the patient would not be able to tolerate any procedures unless done under general anesthesia. As such, the patient was taken to the operating room and while under general anesthesia, general surgery manually disimpacted multiple whole sunflower seeds from the rectal bezoar in the rectal vault. Multiple rectal fissures were noted on examination with a rigid sigmoidoscope while in the operating room. Overall, the patient tolerated the procedure well and was in considerably less pain the next day. He began to have regular bowel movements on the first post-operative day and was discharged home with a soft/liquid diet.

Discussion

Bezoars are concretions of undigested or partially digested foreign material in the gastrointestinal or genitourinary tract of humans or animals.[1]

An enterolith (bezoar) usually originates in an intestinal diverticulum or in a segment of bowel loculated by stricture formation. Stasis promotes its formation.[2] Bezoars occur in patients with altered gastrointestinal motility and/or anatomy. Previous gastric surgery is the most common predisposing factor occurring in approximately 70% to 94% of patients with bezoars.[3]

Incomplete mastication can also precipitate formation of bezoars. Any indigestible material, for example even a potato skin, has the potential to form a bezoar in the right setting.[4]

Bezoars are traditionally classified based on the material of origin.[5] Commonly described bezoars

include phytobezoars (composed of nondigestable food materials),[6] trichobezoars (composed of hair), lactobezoars (composed of lactose), and medication bezoars. The majority of bezoars occur in the stomach in patients with delayed gastric emptying or previous abdominal surgery.[7]

Conclusion

It is unusual to see cases of bezoar in the large intestine particularly in a person who never had abdominal surgery. Thus this case of rectal bezoar in a man with no past medical or surgical history is very uncommon.

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