

Retroperitoneal Rectal Perforation Due to Pomegranate Seed Bezoar: A Rare Case

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Author Contribution:

All authors contributed to the study conception and design. Material preparation, data collection and acquisition were performed by all authors. All authors read and approved the final manuscript.

Abstract:

Various causes are involved in rectal perforation aetiology, including: Iatrogenic perforations, traumatic perforations, malignant or diverticular disease perforations, stercoral perforations, and idiopathic perforations. Rectosigmoid perforations are life-threatening and require immediate diagnosis and surgical treatment. Bezoars are accumulations of indigestible foreign matter that accumulate in the gastrointestinal tract. Seed vesicles are a subset of phytobizzars produced by plant seeds or undigested fruit kernels. Most Intestinal bezoura occur in the rectum, causing constipation or nonspecific abdominal or rectal pain. The following is a report of a case of pomegranate seeds in the rectum that resulted in retroperitoneal rectal perforation.

Introduction

various causes are involved in rectal perforation aetiology, including: Iatrogenic perforations, traumatic perforations, malignant or diverticular disease perforations, stercoral perforations, and idiopathic perforations. Other causes of rectosigmoid perforations, such as systemic lupus erythematosus and Behçet's illness, connective tissue diseases like rheumatoid arthritis, and viral diseases like cytomegalovirus, are uncommon. Non-steroid anti-inflammatory medicines and steroids are the most common drugs to cause perforations. Despite the fact that a wide range of aetiological agents are involved in the aetiology of rectosigmoid perforations, there are certain occurrences of idiopathic perforation (1,2).

Bezoars are accumulations of indigestible foreign matter that accumulate in the gastrointestinal tract. Seed vesicles are a subset of phytobizzars produced by plant seeds or undigested fruit kernels, and the majority are found in the rectum of patients without predisposing factors. Known risk factors include poor chewing, previous gastric surgery, neuropsychiatric disorders, and endocrine disorders that impair gastrointestinal motility (3,4). The following is a report of a case of pomegranate seeds in the rectum that resulted in retroperitoneal rectal perforation.

Case Presentation

A 56-year-old woman presented with a lower abdomen tenderness which was localized in the hypogastrium. The patient had a history of appendectomy several years ago. Paraclinical results showed leukocytosis (13700). But other laboratory tests were normal. X-ray and ultrasonography did not report any specific findings. Retroperitoneal air and extraperitoneal perforation were observed on CT scan (Figure 1,2). The patient underwent laparotomy and an accumulation of pomegranate seeds that caused perforation was observed therefore rectal excision with end colostomy in the sigmoid region was performed. There were no other findings in the colostomy. Pathological results showed only rectal inflammation.

Discussion

Rectosigmoid perforations are life-threatening and require immediate diagnosis and surgical treatment. Clinical findings are typically enough to make a diagnosis. Due to the lack of particular symptoms, it may be difficult to clinically diagnose the location and cause of the perforation. The size of the perforation, the colonic segment where the perforation occurred, the mechanism of perforation development, peritoneal contamination, and the underlying colonic pathology can all influence the clinical diagnosis. Symptoms and signs might appear early or late after perforation, just as they can be asymptomatic. General or localized stomach pain, nausea/vomiting, and chest discomfort are all common perforation symptoms (5,6).

The seeds pass through the pylorus and ileocal valve due to their small size and gradually accumulate in the large intestine. Reaching the rectum, the stool mass becomes more dehydrated and forms a hard bezourea, which usually appears as a stool occlusion. Conversely, normal gastric phytobiozoes are caused by the consumption of indigestible fibers (cellulose, lignin, tannins). Previous studies of gastrointestinal bezovar reported more than 85% of risk factors (43-55% of previous gastric surgery, 12-28.6% of diabetes, persimmon consumption 17.5-40.5%). Most Intestinal bezourea occur in the rectum, causing constipation or nonspecific abdominal or rectal pain. There have been no reports of retroperitoneal perforation of the rectum (7-9).

Patients who visit therapeutic experts don't continuously report their past restorative history, either because they don't consider it imperative or since they don't consider it important to their issue (10,11). Satisfactory therapeutic preparing and taking a point by point therapeutic history, which ought to incorporate the patient's past therapeutic and sedate history and checking the common wellbeing status, are fundamental to distinguish patients with related therapeutic conditions and anticipate the coming about dangers in choosing treatment (12,13). Too, in patients who are making their to begin with visit, pros ought to be counseled to examine different perspectives of their wellbeing status (14,15). Their simplification, counting those that are vague to the specialist, ought to be clarified after checking on the records or conducting a physical examination (16-18).

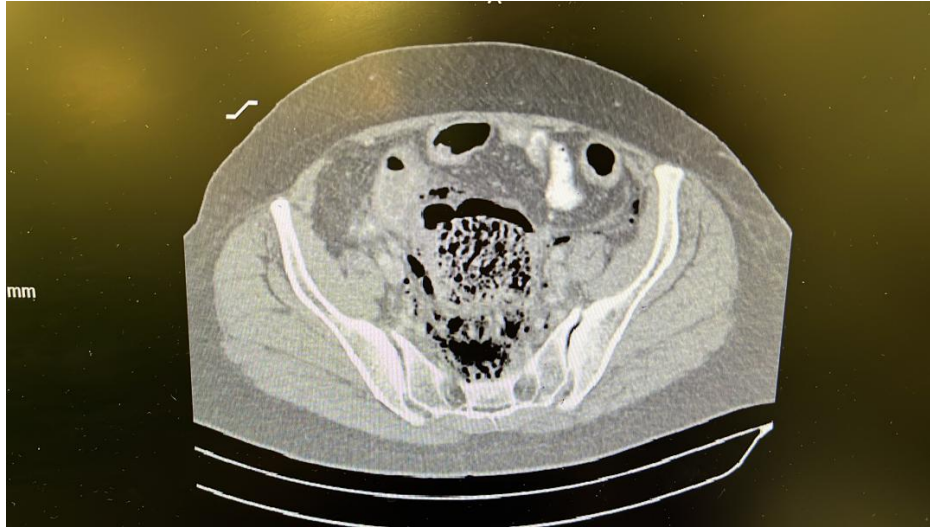


Figure 1: ct finding (Retroperitoneal air and extraperitoneal perforation)



Figure 2: ct finding (Retroperitoneal air and extraperitoneal perforation)

Compliance with Ethical Standards:

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Informed consent: Informed consent was obtained from the participant prior to the study for publication of this case report and accompanying images.

Conflict of Interests: The authors declare no potential conflict of interest.

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