

Foreign bodies in the rectum: 2 Case reports

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ABSTRACT

Encountering a foreign object in the rectum is rare; however, the incidence has greatly increased in recent years. Treatment of these patients requires a multidisciplinary approach because this condition may have serious complications. Presently described is management of 2 cases of rectal foreign body treated in the clinic.

Keywords: Complication; foreign body; perforation; rectum.

Foreign objects are most often encountered in upper gastrointestinal system; very rarely, foreign bodies are seen in lower gastrointestinal system or rectum. Foreign objects may be inserted into rectum accidentally, for sexual satisfaction, or to inflict harm. Embarrassment of patient and inability to obtain satisfactory anamnesis complicate treatment process [1, 2].

Various kinds of foreign object may be observed in the rectum, including sharp instruments that may pierce rectum, colon, or create visceral organ injuries. In addition, factors such as delayed treatment have prevented formulation of a standard guideline for these circumstances [2]. Removal of intrarectal foreign object is a complicated issue for surgeons. Locating and extracting the item is an emergency procedure that can have serious complications [3]. Therefore, review of diagnosis and treatment process in 2 cases of intrarectal foreign object is presented.

CASE REPORT

Case 1 — A 52-year-old male patient contacted emergency services with abdominal and anal pain that had gradually increased over nearly 6 hours. Detailed medical history of patient revealed that he had inserted a foreign object into rectum and that he had occasionally done so to achieve sexual satisfaction over period of nearly 2 years. Patient stated that he had placed glass mineral water bottle in a glove and covered it with lubricating gel before inserting it into his rectum, but this time he couldn't remove it. On physical examination, abdomen was relaxed and natural. Complete blood cell count (CBC) and biochemical parameters were within normal range. On digital rectal examination, base of bottle was palpated as solid object 5-6 cm proximal to anus. Standing abdominal radiographs of patient were obtained in emergency department for differential

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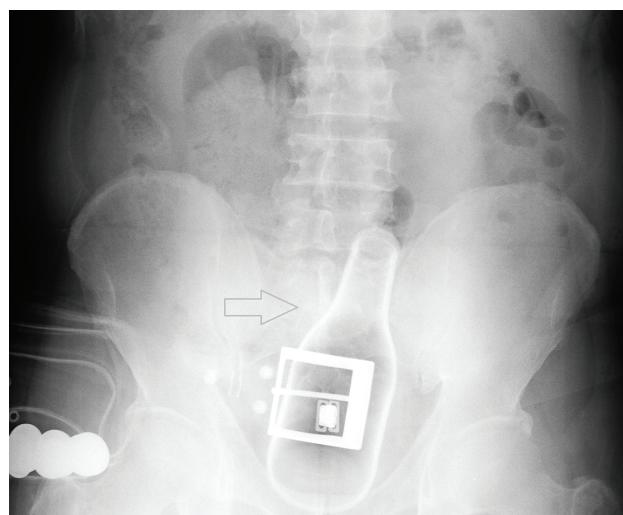


FIGURE 1. Intrarectal glass bottle detected on erect abdominal radiograph of Case 1.

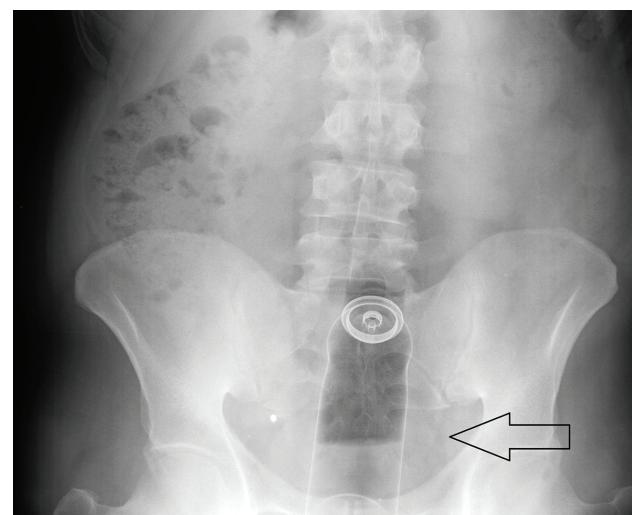


FIGURE 2. Image of deodorant bottle seen on erect abdominal radiograph of Case 2.

diagnosis, and showed bottle in the rectum without any evidence of free air or air-fluid levels. (Figure 1). Anal canal was dilated under sedation anesthesia; however, foreign body could not be extracted. Retroscopy under general anesthesia revealed base of bottle had completely occluded the lumen, and procedure was unsuccessful. Infraumbilical incision was performed and during exploration, foreign object was palpated in the colon. Manual effort to eject object from the outside also failed. Colotomy was then performed, and bottle was extracted in its entirety and without breakage (Figure 2). Colon was closed and there was no indication of intra-abdominal fluid or perforation. Postoperative period was uneventful. Psychiatric consultation and follow-up at outpatient clinics of psychiatry and general surgery were recommended prior to hospital discharge.

Case 2 — A 40-year-old male patient consulted emergency services with complaints of abdominal pain and constipation lasting for 4 hours. From patient's medical history, it was learned that he had been occasionally inserting foreign objects into his rectum for sexual satisfaction for nearly 1 year. He had no known history of chronic disease, and reported no drug use or substance abuse. He stated that this time he had inserted a deodorant container into his rectum but was unable to remove it. Physical examination revealed bilateral tenderness of

lower abdominal quadrants. CBC and biochemical parameters were within normal limits. During digital rectal examination a solid object was palpated



FIGURE 3. Surgically extracted rectal foreign object seen in Figure 1.

and erect view abdominal radiograph was taken. There was no indication of air-fluid levels or intra-abdominal free air. Intrapelvic deodorant container was observed (Figure 3). Digital rectal examination was repeated under sedation anesthesia; however, foreign object could not be extracted. Patient was transferred to operating room, anal canal was dilated under general anesthesia, and object was removed manually. Postoperative period was uneventful. Patient was discharged with recommendation of psychiatric follow-up in outpatient clinic.

Personal information of patients has not been disclosed, and written informed consent of both patients was obtained.

DISCUSSION

Management and treatment of patients who contact emergency services with intrarectal foreign body is truly very complex and challenging for surgeons. Generally, patient has inserted the object body into own rectum; rarely it may happen accidentally, or it may be the result of a criminal act. In the present cases, both patients had inserted foreign objects into their rectum seeking sexual satisfaction [4].

The objects used are things such as a drinking glass, a bottle, a deodorant container, a wooden stick, a sex toy, or various other household items [1]. In the first case presently described, a glass mineral water bottle nearly 15 cm long was removed, and in the second, a deodorant bottle measuring 12 cm was extracted. Most of the time, the objects can be removed by the patients themselves, though 20% of cases require endoscopic intervention. Only 1% involve surgical intervention [5]. Both of present patients indicated that they had previously been able to remove inserted foreign objects; however, when last attempt failed, they contacted emergency services.

Review of literature provides descriptions of various methods to extract foreign objects. Principal methods have been performed under sedation or general anesthesia, and include manual transanal extraction, endoscopic transanal extraction using Kocher clamp, laparoscopic transanal extraction, and laparotomy through a single incision. In the

first case described presently, laparotomy followed by colostomy was required to remove the object, while in second case, manual extraction was performed under general anesthesia [1, 6, 7]. Glass objects broken during manual extraction can cause injuries to colon mucosa or hand of the surgeon, and may lead to sphincteric dysfunction [8]. Meticulous care should be exercised during extraction. Though generally no complications are seen, rarely very serious complications have occurred. In the literature there are reports of rectal perforations and bleeding, gas-fecal incontinence, bladder injuries, iliac vessel injuries, and migration of intrarectal foreign body to chest wall, leading to extensive injury. In such cases, diversion procedures have occasionally been performed [3].

In present cases, possible presence of perforation or peritonitis was considered in physical examination in order to detect acute abdomen, and abdominal radiographs were examined for signs of intra-abdominal free air. Based on absence of any perforation or peritonitis, abdominopelvic computed tomography (CT) was not considered necessary; however, it would have been requested if signs of acute abdomen were present or if diagnoses were delayed. Both physicians and patients were very lucky that no complications developed in the presently described cases. Hospital stay and duration of treatment were reduced.

Buluş et al. did not perform diversion procedures because of fecal contamination, perforation, fear of injuring other intra-abdominal organs, lack of stable vital signs, and need for early intervention [2]. In the present cases, lack of peritoneal irritation, abdominal contamination or perforation eliminated need for diversion procedures.

In conclusion, a general approach is available for foreign bodies detected in upper gastrointestinal system; however, clear guidelines for removal of intrarectal foreign objects have not yet been determined [9]. Approach to these cases and treatment process is still a complex issue. Varying characteristics of objects such as perforating or cutting qualities, size, hardness, and depth of insertion are determinative factors for surgical procedure and post-treatment follow-up of the patient. Referral of these patients

to psychiatry outpatient clinics for treatment of any underlying issues may be beneficial.

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REFERENCES

1. Cologne KG, Ault GT. Rectal foreign bodies: what is the current standard? *Clin Colon Rectal Surg* 2012;25:214–8.
2. Buluş H, Aydin A, Koyuncu A, Sugüneş T, Akpinar A, Coşkun A. Case of unusual foreign body in the rectum. *Turk J Colorectal Dis* 2010;20:185–7.
3. Thomas VP. A rare case of penetrating rectal injury. *Indian J Surg* 2013;75:242–4.
4. Caliskan C, Makay O, Firat O, Can Karaca A, Akgun E, Korkut MA. Foreign bodies in the rectum: an analysis of 30 patients. *Surg Today* 2011;41:795–800.
5. Anderson KL, Dean AJ. Foreign bodies in the gastrointestinal tract and anorectal emergencies. *Emerg Med Clin North Am* 2011;29:369–400.
6. Elias B, Debs T, Hage S, Bassile B, Hanna P, Saint Eve P. Single incision laparoscopic surgery technique for transanal removal of rectal foreign body. *J Surg Case Rep* 2014;20:1–3.
7. Yilmaz B, Ozmete S, Altinbas A, Aktaş B, Ekiz F. Successful removal of an unusual rectal foreign body with a Kocher clamp. *Endoscopy* 2014;46 Suppl 1 UCTN:E549.
8. Şahin A, Çapa T, Javadi M. Rektal yabancı cisimler. *Kolon Rektum Hastalıkları Dergisi* 1995;5:12–4.
9. Yıldız İ, Yıldız İ, Yıldız ÖÖ, Bayır H, Genç A. Evolving with chicken bones Partial Airway Obstruction: A Case Report. *Abant Medical Journal* 2015;4:290–2.