

Removal of a large foreign body in the rectosigmoid colon by colonoscopy using gastrolith forceps

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Abstract

Rectal foreign bodies are man-made injury that occurs occasionally. The management depends on its depth and the consequence it caused. We here report a case of rectal foreign body (a glass bottle measuring about 38 mm × 75 mm) which was located 13-15 cm from the anus. The patient had no sign of perforation, and we managed to remove it using endoscopy with gastrolith forceps.

Key words: Foreign body; Rectosigmoid; Endoscopy; Removal; Gastrolith forceps

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Core tip: Rectal foreign bodies happen occasionally. The majority of rectal foreign bodies inserted by adults are for self-gratification. As such they are likely to be smooth, rounded, cylindrical, or egg shaped to allow ease of introduction and removal. The factors that determine whether a rectal foreign body can be removed transanally are the shape, size, location of the object, and the presence or absence of perforation. We here report a case of rectal foreign body (a glass bottle measuring about 38 mm × 75 mm) which was located 13-15 cm from the anus. The patient had no sign of perforation, and we managed to remove it using endoscopy with gastrolith forceps.

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INTRODUCTION

The majority of rectal foreign bodies inserted by adults are for self-gratification. As such they are likely to be smooth, rounded, cylindrical, or egg shaped to allow ease of introduction and removal. The factors that determine whether a rectal foreign body can be removed transanally are the shape, size, location of the object, and the presence or absence of perforation. We here report a case of rectal foreign body (a glass bottle measuring about 38 mm × 75 mm) which was located 13-15 cm from the anus. The patient had no sign of perforation, and we managed to remove it using endoscopy with gastrolith forceps.

CASE REPORT

A 40-year-old male was admitted due to retention of a large foreign body in the rectal colon (Figure 1). He put a glass bottle into his anus in his self-sexual play 3 d before admittance. On physical examination, a cylindrical shape glass plat about 4 cm in diameter could be touched in the rectal touch 4 cm from the anus. Plain abdominal radiograph revealed a bottle shape foreign body (measuring about 38 mm × 75 mm) retained in hypogastric zone adjacent to pubic symphysis, without sign of perforation. The open of the bottle was in the proximal region of the colon, and the basal of the bottle was near the anus, which made it difficult to remove by anal speculum. The bottle slid into the rectosigmoid colon deeper during the procedure (Figure 2). We decided to have a colonoscopy as a last method before cutting him open. In the colonoscopy, it was found that a wide basal glass bottle filled the colon 15 cm from the anus. The use of snare and basket failed to noose the bottle (Figure 3). We decided to use gastrolith forceps to noose the bottle. After full gas filling, we were able to noose the basal part of the bottle. The patient felt painful, so lumbar anesthesia was performed to relieve the spasm of the colon and pain. The bottle was carefully and slowly dragged to the open of the anus, and it was successfully removed outside the patient by colonoscopy. There was no sign of bleeding, injury or perforation in the post-extraction sigmoidoscopy and 2 d observation following. Then the patient was discharged. The patient had no perforation, bleeding or fecal incontinence during one-month follow-up.

DISCUSSION

The majority of rectal foreign bodies inserted by adults are for self-gratification^[1]. As such they are likely to be smooth, rounded, cylindrical, or egg shaped to allow ease of introduction and removal^[2]. The factors



Figure 1 A 40-year-old male was admitted due to retention of a large foreign body in his rectal colon. Plain abdominal radiograph revealed a bottle shape foreign body (measuring 38 mm × 75 mm) retained in the rectal colon, with no sign of perforation.



Figure 2 Bottle slid into the rectosigmoid colon deeper during examination. We decided to have a colonoscopy as a last method before cutting him open. In the colonoscopy, the glass bottle filled the colon 15 cm from the anus.

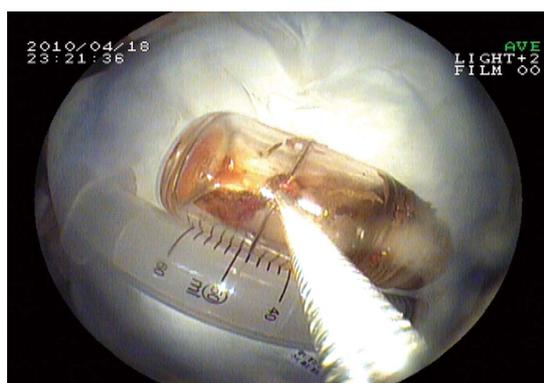


Figure 3 The use of snare and basket failed to ensnare the foreign body. We used gastrolith forceps to retrieve the bottle. The bottle was carefully and slowly manipulated to the opening of the anus and successfully removed out by colonoscopy.

that determine whether a rectal foreign body can be removed transanally are the shape, size, location of the object, and the presence or absence of perforation^[2]. In the non-perforated stable patient, the object should be removed with a local block and/or conscious sedation

via the transanal approach. If this fails, the patient should be brought to the operating room for a deeper anesthetic and attempt at transanal extraction. Surgery with a laparotomy should be reserved for patients with perforation or ischemic bowel or cases of failed transanal attempts^[3]. Most of rectal foreign bodies can be removed transanally, but when they go deeper to the sigmoid colon, it is impossible to extract except *via* colonoscopy^[4]. In our patient, the basal, smooth, large part of the bottle was in the distal colon, which makes it much difficult to remove out. We used gastrolith forceps to loop the bottle, and seized it tightly enough to extract.

COMMENTS

Case characteristics

A 40-year-old male presented seeking for medical help due to rectal foreign body insertion.

Clinical diagnosis

Rectal foreign body (glass bottle) insertion.

Differential diagnosis

Bowel perforation, intestinal necrosis, and foreign body rupture.

Imaging diagnosis

A bottle shape foreign body (measuring about 38 mm × 75 mm) retained in hypogastric zone adjacent to pubic symphysis, without sign of perforation.

Pathological diagnosis

Rectal foreign body (glass bottle).

Treatment

Removed using colonoscopy.

Related reports

Foreign bodies of different shapes were reported, little smooth ones can be removed *via* a transanal approach while irregular shape ones needed to be surgically removed.

Term explanation

RFB: Rectal foreign bodies.

Experiences and lessons

For removal of rectal foreign bodies *via* a transanal approach, relaxation of patients and full dilation of the anus are very important.

Peer-review

This is an interesting case and the X-ray imaging showed a typical rectal foreign body. Anesthesia before retreating the foreign body should be considered.

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