

## CASE REPORT

# Difficult Retrieval of Glass Bottle in the Rectum: How the Story End?

Fitreena Anis Amran<sup>1</sup>, Mohamad Faiz Hafizi Mansor<sup>2</sup>, Muhammad Syafiq Abdul Razak<sup>2</sup>, Mohd Fahmey Sabudin<sup>2</sup>

<sup>1</sup> Radiological and Oncological Cluster, Advanced Medical and Dental Institute, Universiti Sains Malaysia, 13200 Bertam, Kepala Batas, Pulau Pinang

<sup>2</sup> Department of Surgery, Hospital Seberang Jaya, Jalan Tun Hussein Onn, 13700 Seberang Jaya, Pulau Pinang

### ABSTRACT

Rectal foreign body is not an uncommon encounter in current medical practice. It reported occurs due to sexual eroticism, sexually abuse, assault or involuntary insertion. This condition possesses significant challenge among general surgeons on handling these cases. Diagnosis usually made by history taking, physical and radiological examination. We presented a case of a 43years old mentally challenge gentleman with retained rectal foreign body of three-week duration whom presented with non-specific abdominal pain, abdominal mass and loose stool. Due to low suspicion of rectal foreign body, the management flow skid from the norm. Attempt of removing rectal foreign body by various method was unsuccessful and his had to undergone exploratory laparotomy. Hence, propose flow of management in rectal foreign body is also included in this report.

**Keywords:** Rectal foreign body, Intestinal obstruction, Abdominal mass

### Corresponding Author:

Fitreena Anis Binti Amran, PhD

Email: fitreena@usm.my

Tel: +604-5622545

### INTRODUCTION

Presentation of foreign body inside rectum is no longer a surprise to medical world even though it is a rare situation. It is first described back in 16th century (1). However, the way patient presented and the type of items found in the rectum still surprise us in medical world. Most presented with intestinal obstruction symptoms but yet some has no symptoms at all. Most case reports association of rectal foreign body and anal eroticism (1,2). Beside that, rectal foreign body also bring great deal of challenge in clinical management, cause serious complications and sometimes permanent damage (3).

### CASE REPORT

43 years old gentlemen with learning disabilities since childhood presented with loose stool for three-week duration. It was associated with blood stained and mucus discharge. There was no vomiting or loss of appetite but he has minimal loss of weight. He also claimed to have occasional colicky abdominal pain since the pass three week. He noticed there was a hard mass in his lower abdomen. Socially, he is a single man staying alone with nearby family member around him. There was no prior medical or surgical problem before.

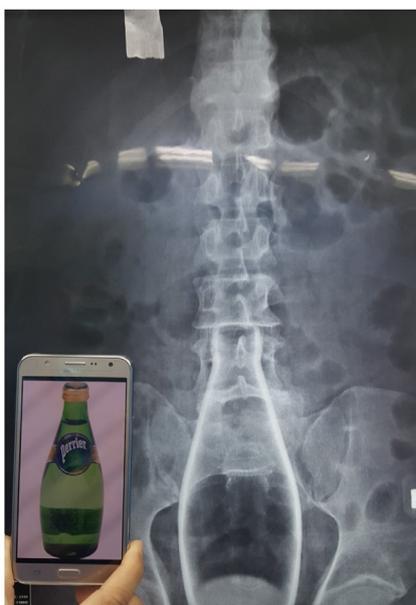
Upon examination, he is a well build gentleman with stable vital sign. There was a hard mass at suprapubic region extending to umbilicus. It was mobile laterally but not vertically. We can get above the mass but not below it. The mass was hard with well define border. No other mass noted. His abdomen was non-tender on palpation. No lymph nodes palpable. On, per rectal examination there was empty rectum and no mass felt.

His blood investigation was in normal range. In view of the presentation, colorectal cancer was the provisional diagnosis in mind. Colonoscopy was proceeded under sedation and to our surprise we noted a glassy shinning material in the rectum (Figure 1). Colonoscopy was able to pass through the object till the tip of the bottle. However, we unable to evacuate it as the bottle was heavy and significantly large. In view of this finding, we sent him for imaging study including abdominal x-ray and contrast enhanced computed tomography of abdominal and pelvis. Abdominal x-ray revealed the bottle in a standing up position from mid abdomen until the pelvic bone (figure 2). CT scan showed proximal dilatation of the bowel but the sigmoid and rectum appear thicken with foreign body in situ. No intraperitoneal gas or fluid present.

In view of this, attempt of bottle removal under general anesthesia keeping in mind of laparotomy was proceeded. Multiple attempted to remove the bottle per rectally using multiple method available (colonoscopy, manual evacuation by hand and suction vacuum) was unsuccessful. The reason of the failure was basically the



**Figure 1: Colonoscopy image of retained bottle in the rectum**



**Figure 2: Abdominal x-ray image of bottle location**

shape of the glass bottle which is conical n shape and has larger body than the bottom. Hence, the bottle kept getting stuck at the pelvic bone area. In view of this, lower midline exploratory laparotomy was the last resort to remove the bottle. The bottle was retrieved successfully via laparotomy and sigmoid colon incision (Figure 3). The sigmoid colon then brought up as double-barrel stoma because it is thickened and inflamed. Besides that, there was induced trauma around the anal canal during the attempt of removing the bottle per rectally. Anal hemostasis secure.

Post operatively, he was well with no complication. His was able to tolerate orally as usual and his stoma was functioning well. His anal trauma wound was clean and he did not has any complaint about it. Upon asking him for further history on how the bottle end up in his



**Figure 3: Retrieved bottle**

large bowel or whether he was sexually assaulted, he cannot give any explanation. He cannot remember putting the bottle inside by himself or someone else sexually assaulted him. Post operation day three, he was discharge home with wound and stoma care education.

**DISCUSSION**

Retained rectal foreign body seem like a joke to many yet it is an intriguing medical condition. The exact incidence is unknown but based on case reports around the world, the presentation age ranges from 14-76 years old (1). Epidemiologically, most cases were reported in the Western society than Asian (4). Many is due eroticism, but some reported case is due sexual abuse or assault or involuntary nonsexual foreign bodies. Involuntary nonsexual foreign body generally occurs among elderly, children, mentally ill or mentally challenges like in our case (3). Items reported as in rectal foreign body varies from large smooth object like bottle to thermometer tips which occur in a 50 days-old baby (accidental) (2). Most patient present with acute intestinal obstruction symptoms but for some they present with non-obstruction vague abdominal pain, rectal bleed or infection (5). However, no case yet reported on patient presented with prolonged loose stool like us.

Upon examination, complicated rectal foreign body may have sign and symptoms of peritonitis while non-complicated rectal foreign body may not. Per rectal examination may revealed lax anal tone with wide

anal cavity especially in recurrent anorectal stimulation with foreign body. The easiest available investigation to confirm this condition is abdominal including the pelvic area. Image of foreign body is usually visible and other pathological condition like intestinal perforation can also be identified.(4) Colonoscopy can be performed for two reason, to identified the cause of intestinal obstruction (ruling out malignant condition) or as a method to retrieved the rectal foreign body. Difficulties we encountered in this patient as he is mentally challenge was at the history taking and high suspicion of malignancy due to mass over suprapubic region suggestive of malignancy instead of retained rectal foreign body.

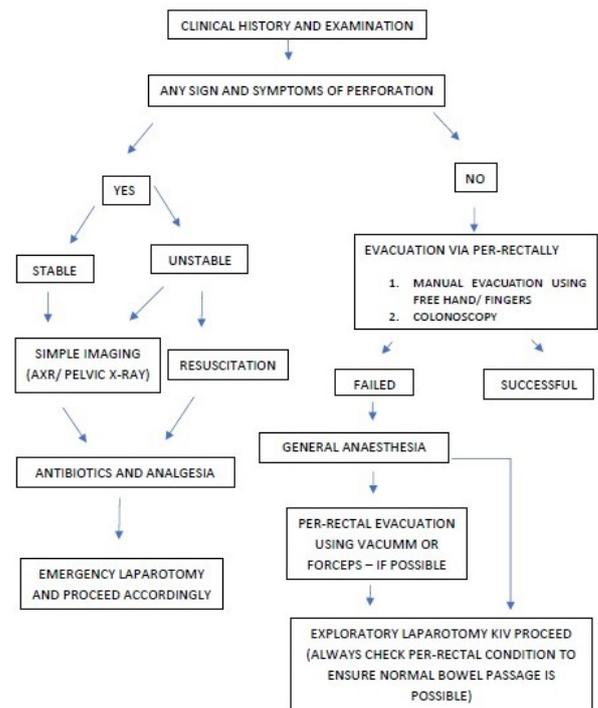
Rectal foreign body that lies below rectosigmoid junction usually can be retrieve per-rectally (5). However, if it lies above rectosigmoid junction, exploratory laparotomy might be the best choice of treatment. Beside this, others factors like size and shape of the objects, present of sign and symptoms of peritonitis and evidence of perforation will also affect the choice of treatment (3). Failure of retrieving the items per-rectally or via laparotomy may need help form orthopedic colleague to open up the pelvic symphysis as the object can be stuck around the pelvis region due to its massive size (1). Our patient undergone exploratory laparotomy and double barrel stoma due to failed per-rectal retrieval and trauma around anal region. The reason of failure mainly due to the bottle shape which is conical with smaller bottom than the body where it gets stuck around the pelvic outlet. Fortunately, we did not have to call orthopedic colleague to help us upon retrieving it via laparotomy. His other internal organ was also in good condition with no intraabdominal collection and contamination. Post-operatively, his overall condition improved a lot and he was discharge at day 3 post-operatively despite his anal trauma. Along with this we attached suggested pathway in managing rectal foreign body (Figure 4).

## CONCLUSION

Foreign body inserted per rectally can present as acute event or delayed event. It can be a straight forward case or clinically challenging. Hence, proper assessment on clinical features and prompt investigation should be carried out to ascertain the diagnosis. Once diagnosis is confirmed, method of retrieval should be of concern to minimize complications.

## ACKNOWLEDGEMENTS

Special thanks to head of Department of Surgery Hospital



**Figure 4: Suggested pathway for management of patient with rectal foreign body**

Seberang Jaya in managing this patient. No conflicts of interest in managing this patient.

## REFERENCES

1. G. Kasotakis, L. Roediger, S. Mittal. Rectal foreign bodies: A case report and review of the literature. *International Journal of Surgery Case Reports*. 2012 (3) 111-115
2. KS Hanumathaiah, Madhusudhan M Gopivallabh, Prashantha B Babannavar, K Jaganmaya. Retained Rectal Foreign Body and its Management Protocol. *People's Journal of Scientific Research*. 2014 (7) 51-55
3. Ali Coskun, Nazif Erkan, Savas Yakan, Mehmet Yildirim, Fevzi Cengiz. Management of rectal foreign bodies. *World Journal of Emergency Surgery*. 2013, 8:11
4. Murtaza A. Akhtar, Pooja K. Aora. Case of Unusual Foreign Body in the Rectum. *The Saudi Journal of Gastroenterology*. 2009 (15)2, 131-132
5. Muahit Ozbilgin, Baha Arslan, Mehmet Can Yakut, Suleyan Ozkan Aksoy, Mustafa Cem Terzi. Five years with a rectal foreign body: A case report. *International Journal of Surgery Case Reports*. 2015 (6) 210-213