

OUCH!!! A FAUCET AS RECTAL FOREIGN BODY: A CASE REPORT WITH REVIEW OF LITERATURE

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ABSTRACT

Colorectal foreign bodies are not so commonly encountered. Their presence is usually indicative of homosexuality, autoerotism or a mentally unstable individual. The main reasons for the presence of foreign bodies include pruritus ani, accidental insertion, alleged assault, drug smuggling, iatrogenic (e.g. migration of colonic stents), and psychosexual motives. The wide variety of objects and variation in trauma to local tissues of the rectum and distal colon warrants a systematic approach to the diagnosis and management of rectal foreign bodies. We present a case of a 27 year old patient with an alleged history of accidental insertion of a faucet in his rectum. The transanal extraction was not successful. So, lower midline laparotomy was performed and the faucet was retrieved after colotomy.

KEYWORDS: Rectal foreign body, faucet, management.**INTRODUCTION**

Rectal foreign body insertion cases are generally associated with autoeroticism, concealment, attention-seeking behaviour, accidental, assault and to alleviate constipation.^[1] Most commonly encountered objects in such cases are bottles, food items, toothbrushes, flashlights, rods, sex toys and other household items.

In such patients, the trans-anal approach for withdrawal of rectal foreign body is highly efficient in 60-75% of cases. It is particularly helpful if the foreign body is present within 10cm of the anal verge and no signs of peritonitis are present.^[2]

Rectal foreign bodies (RFB) can present to the surgeon with a difficult management dilemma, as the type of object, host anatomy, time from insertion, associated injuries and amount of local contamination may vary widely. Reluctance to seek medical help and to provide details about the incident often makes diagnosis difficult.

Management of these patients may be challenging, as presentation is usually delayed after multiple attempts of removal by the patients themselves.

In present case, 27years old male came with history of accidental insertion of a toilet faucet(jet spray) per anum with inability to withdraw. Ultimately we had to do

laparotomy to retrieve the faucet as inability to withdraw it per anum even under anaesthesia.

CASE REPORT

A 27 years old male patient presented to the emergency room with complaints of passage of bright red color stools with an alleged history of accidental fall over a faucet which got stuck inside his rectum. The patient had reported no complaints of pain in the abdomen, abdominal distension or non-passage of flatus or stools.

On examination, he was hemodynamically stable. On per abdominal examination, a foreign body was palpable in the left iliac fossa, 5 cm lateral to midline. The patient revealed no tenderness or guarding. On digital rectal examination, the lower metal edge of the foreign body was felt about 5 cm from the anal verge. No active bleeding was seen per anum with no evidence of surrounding perineal injury.

A Radiograph of abdomen revealed the foreign body to be the faucet of a jet spray lodged in the recto-sigmoid region. No air fluid levels were seen ruling out proximal bowel obstruction. Erect chest x ray revealed no air under right hemi-diaphragm ruling out bowel perforation. (Fig.1)



Fig. 1: Xray abdomen with pelvis showing site of rectal foreign body and xray abdomen erect ruling out free gas under diaphragm and multiple air fluid levels.

Plain CT scan and CT with 3d Reconstruction showed the orientation of the foreign body with the horizontal spray end with handle lodged transversely in the fold of recto-

sigmoid and the body of faucet oriented vertically extending distally till the anal canal. (Fig.2)

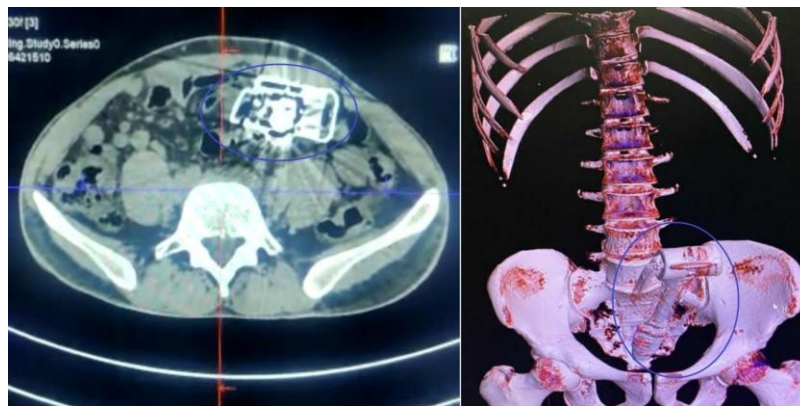


Fig. 2: Plain CT and 3D CT showing rectal FB.

For the patient, we decided to proceed with trans-anal extraction. After giving spinal anaesthesia and keeping the patient in lithotomy position, multiple attempts were made to extract the object, even with Foley’s bulb inflation, but it was not negotiable beyond the upper limit of the object. We found that two factors were limiting the rotation of the object. One factor being the ‘T’ shape of the object and the other factor was that it

had crossed the pelvic brim, as evident in the CT and Radiograph. This had impacted the object and had hence narrowed the lumen of the bowel. A decision was taken to proceed with a lower midline laparotomy and colostomy. An incision of 3 cm was taken over sigmoid colon and the faucet was retrieved. (Fig.3) Colotomy was closed with PDS 3-0 continuous sutures.



Fig. 3: Retrieval of Rectal FB and the faucet (FB).

Patient was started on clear liquids from post-operative day 2 followed by soft diet from day 3 and solid diet thereafter. Abdominal Suture lines were healthy with no evidence of wound infection. Patient did not give any complaints of anal incontinence or difficulty in passing stool post-operative. He was discharged on post-operative day 5 on full diet.

DISCUSSION

Objects can be inserted into the rectum for diagnostic or therapeutic purposes, self-treatment of anorectal disease, during criminal assault or accidents, or (most commonly) for sexual purposes.^[3] The incidence is more in males, bimodal, in young to middle- aged men for analerotism or forced introduction through anus, and in the sixties mainly for prostatic massage and breaking fecal impactions.^[4]

Rectal foreign bodies can be classified as voluntary versus involuntary and sexual versus nonsexual, out of which voluntary insertion for sexual stimulation is most common.

Commonly reported objects are plastic, glass bottles, wooden, or rubber objects, vibrators, utensils.^[4,5,6] Rectal foreign bodies can be also found in drug traffickers, known as 'body packing'.^[5] Involuntary nonsexual foreign bodies are generally found in the elderly, children, or the mentally ill, such as retained thermometers, enema tips erasers, coins or small plastic toys.^[5]

All retained rectal foreign bodies should be treated as potentially hazardous.^[5] Patients may complain of vague abdominal pain, rectal bleeding or pain and sometimes constipation.^[4,5,6] Complicated cases may present with intestinal obstruction or perforation. Physical examination should include a careful abdominal examination to assess for signs of peritonitis or the ability to palpate an object transabdominally. The rectal foreign body can be palpated in either the left or right lower quadrant of the abdomen.

Digital Rectal Examination indicates the proximity of the object to the pelvic floor, functional status of the sphincter complex; and if the foreign body is not palpable by rectal exam, further evaluation with rigid or flexible procto-sigmoidoscopy should be performed. The sphincter may have obvious damage with visible injury to both the internal and external sphincters.^[4] However patients with habitual insertion of objects may not have any symptoms and may have normal anal sphincter tone.

Antero-posterior and lateral x- rays of the abdomen and pelvis should be obtained to assess the objects position, orientation, shape, size, and presence of pneumoperitoneum.

The decision of approach of retrieval of the object depends on the size, shape, orientation of the object.^[4,5,7]

In clinically stable patients without evidence of perforation or peritonitis, per anal removal of rectal foreign body can be attempted.

Attempts of retrieval should be made only after ensuring adequate patient analgesia. When attempting to remove a rectal foreign body transanally, the most important factor in successful extraction is patient's relaxation. This can be achieved with a pudendal nerve block or spinal anaesthesia.^[5,6]

The lithotomy position facilitates removal of most objects and has the added benefit of allowing for downward abdominal pressure to aid in extraction of the foreign body with gentle dilatation of anal canal.

After successful removal of a rectal foreign body, the mucosa of the colon and rectum need to be examined. In cases of unsuccessful per anal retrieval, transabdominal approach is used.^[4,5] Surgery is also indicated in all patients who present with perforation (free air), sepsis, or peritonitis.

Some surgeons have also described laparoscopy as an aid to push the object more distally into the rectum for a transanal removal. The first step is to attempt to milk the object distally into the rectum. However this cannot be attempted for sharp objects.

In transabdominal approach, then a colotomy and removal of the foreign object is needed. This colotomy can be primarily repaired. When patients present with a rectal perforation, they should at first be stabilized like any trauma patient. Diversion is reserved for patients with perforation and frank peritonitis with extensive fecal contamination.^[4,5]

Small extraperitoneal injuries can also be managed with observation, avoidance of oral feeding, and antibiotics.^[8]

Traumatic disruption of the anal sphincter can result in mild to severe faecal incontinence, depending on the degree of the injury. Attempts for surgical correction of any sphincter injury should be delayed until adequate time has passed to evaluate any resultant defect and clinical symptoms.

In cases suggestive of perversion disorder, patients should be referred to psychiatrist to prevent recurrence.

In present case, rectal foreign body has been tried to remove per anum under spinal anaesthesia. Removal with foley's catheter inserting across and inflating balloon was also tried. But cause of 'T' shape of faucet, un-pressed knob and as it had crossed pelvic brim, we could not retrieve it, so decision to go ahead with lower exploratory laparotomy was taken.

The faucet was retrieved with colotomy. Patient tolerated procedure well and was discharged on postoperative day

5 on full diet. Patient's psychological counselling was done before discharge.

CONCLUSION

Management of patients with rectal foreign bodies can be challenging and a systematic approach should be followed. The majority of cases can be successfully managed conservatively, but occasional surgical intervention is warranted.

In the non-perforated stable patient, the object should be removed in the emergency department with a local block and/or conscious sedation via the trans-anal approach.

If this fails, then the patient should be taken to the operating room for a spinal anaesthesia and attempt at trans-anal extraction. Surgery with a laparotomy should be reserved for patients with perforation or ischemic bowel or cases of failed trans-anal attempts.

Patient should be referred to the psychiatrist for his perversion disorder, which was also mandatory for preventing recurrences.

REFERENCES

1. Cologne KG, Ault GT. Rectal foreign bodies: what is the current standard? *Clin Colon Rectal Surg.*, 2012 Dec; 25(4): 214-8. doi: 10.1055/s-0032-1329392. PMID: 24294123; PMCID: PMC3577617.
2. Nepal A, Maharjan S, Chalise A, Rajbhandari AP. Rectal Foreign Body: A Case Report. *JNMA J Nepal Med Assoc.*, 2022 Dec 1; 60(256): 1049-1051. doi: 10.31729/jnma.7905. PMID: 36705106; PMCID: PMC9795131.
3. Koomstra JJ, Weersma RK: Management of rectal foreign bodies: Description of a new technique and clinical practice guidelines. *World J Gastroenterol*, 2008; 14(27): 4403-4406.
4. Akhtar MA, Arora PK: Case of unusual foreign body in rectum. *Saudi J Gastroenterol*, 2009; 15(2): 131-132.
5. Goldberg JE, Steele SR: Rectal foreign bodies. *Surg Clin N Am*, 2010; 90: a173-184.
6. Singaporewalla RM, Tan DEL, Tan TK: Use of endoscopic snare to extract a large rectosigmoid foreign body with review of literature. *Surg Laparosc Endosc Percutan Tech.*, 2007; 17(2): 145-148.
7. Nivatvongs S, Metcalf DR, Sawyer MD: A simple technique to remove a large object from the rectum. *J Am Coll Surg.*, 2006; 203(1): 132-133.
8. Arora S, Ashrafian H, Smock ED, Ng P: Total laparoscopic repair of sigmoid foreign body perforation. *J Laparoendosc Adv Surg Tech A.*, 2009; 19(3): 401-403. doi:10.1186/1749-7922-8-11