Poster No.
PW 2.12

International Surgical Week
The World's Congress of Surgery
isw2024.org
Kuala Lumpur, Malaysia
25-29 August 2024

Behind Closed Doors: A Unique Case Of Rectal Foreign Body Retrieval

Authors: **Hritik Savla**, Dr. Kavita Jadhav
Institution: Grant Government Medical College and Sir JJ Group of Hospitals, Mumbai, India.

Introduction:

Rectal foreign bodies (RFB) present 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 the diagnosis difficult. Management of these patients may be challenging, as presentation is usually delayed after multiple attempts at removal by the patients themselves have proven unsuccessful.

Case report:

A **27 year 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, stools.
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**. Confirmation was done by a proctoscopy examination.

X-ray and CT scan showed a well-defined hyperdense, elongated, cylindrical structure with rounded distal end, showing beam hardening artifact within the rectum, reaching up to the sigmoid colon, suggestive of a foreign body.


Figure 1: X-Ray abdomen


Figure 2: 3D CECT

We decided to proceed with **Trans-anal Extraction**. Under subarachnoid block and lithotomy position, multiple attempts were made to extract the object with Foley's bulb inflation, but it was **not negotiable beyond the upper limit of the object**. The 'T' shape of the object and the that it had crossed the pelvic brim (as evident in the CT and Radiograph) were limiting the rotation of the object. 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 4 cm was taken over the taenia under general anesthesia. After **transabdominal extraction**, colostomy was closed with PDS 3-0 continuous sutures.

Discussion:

Colorectal foreign bodies are infrequently encountered. Their presence is usually indicative of homosexuality, auto-erotism or a mentally unstable individual. Removal of retained foreign bodies can be a tedious process, requiring considerable skill and ingenuity on the part of the surgeon. **A wide variety of objects have been noted in the literature, including bottles, vibrators, fruits and vegetables, tools, and miscellaneous items such as light bulbs, candles, balls, and flashlights.** 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.

Rectum Injury Scale of the American Association for the Surgery of Trauma
Grade I: Contusion or hematoma without devascularization
Partial thickness laceration of wall
Grade II: Full-thickness laceration of wall that comprises < 50% of circumference
Grade III: Full-thickness laceration of wall that comprises > 50% of circumference
Grade IV: Full-thickness laceration that extends into the perineum
Grade V: Devascularized segment of rectum

Conclusion:

There are various approaches for removal of foreign bodies in rectum and sigmoid. One should perform **least invasive to the most invasive means of extraction**. Transanal extraction with endoscopic assistance has been very effective in removal of foreign bodies without iatrogenic injury. In any case, if Transanal approaches are not successful, laparoscopic intervention is needed.

References:

- 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.
- Coskun A, Erkan N, Yakan S, Yıldirim M, Cengiz F. Management of rectal foreign bodies. World J Emerg Surg. 2013 Mar 13;8(1):11. doi: 10.1186/1749-7922-8-11. PMID: 23497492; PMCID: PMC3601006.
- 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.
- Goldberg JE, Steele SR. Rectal foreign bodies. Surg Clin North Am. 2010 Feb;90(1):173-84, Table of Contents. doi: 10.1016/j.suc.2009.10.004. PMID: 20109641.
- Lim KJ, Kim JS, Kim BG, Park SM, Ji JS, Kim BW, Choi H. Removal of Rectal Foreign Bodies Using Tenaculum Forceps Under Endoscopic Assistance. Intest Res. 2015 Oct;13(4):355-9. doi: 10.5217/ir.2015.13.4.355. Epub 2015 Oct 15. PMID: 26576143; PMCID: PMC4641864.