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Rectal Foreign Body: A Case Report and Review of Literature.

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Rectal foreign bodies are encountered frequently and present a dilemma for management. Most cases can be managed by retrieval of the foreign body per rectum under anaesthesia using some ingenuity. However some cases may require a laparotomy. The aim is to report a case of rectal foreign body treated in our institution. The large volume of prior literature on this subject reviewed. A case admitted in the emergency department with pain lower abdomen and anal region following accidental slippage of stone into the rectum without any sign of peritonitis. Attempt to retrieval it per rectum under anaesthesia failed and laparotomy was performed. The Management emphasis is on transanal retrieval after ruling out rectal and colonic perforation. Surgery should be reserved only for those patients with overt peritonitis and associated complications.

Introduction

Intentional or unintentional insertion of rectal foreign body is no longer a medical oddity. It is encountered frequently¹. Anorectal eroticism with vide variety of phallic substitutes comprised most of the cases¹. Objects can be inserted for diagnostic or therapeutic purposes or self treatment of anorectal disease and as criminal assault. Sometimes they may become lodged in rectum by accident, as a result of depravity and because of imbecility. The presence of such foreign bodies in the rectum has always been a challenge to the surgeon and numerous ingenious approaches have been devised to remove these impacted objects².

The vast majority of objects are inserted by self introduction in children or psychiatric patients. Iatrogenic foreign bodies include thermometers, enema tips and catheters. The objects placed as a result of assault, trauma or eroticism consist of a diverse collection including sex toys (dildos) tools and instruments, bottles, cans, jars, pipes and tubes, fruits and vegetables, stones, light bulbs and flash lights³. Most of the patients with rectal foreign bodies present to the emergency room usually after efforts to remove the object at home have failed¹.

Case Report

A 40 years old patient came to emergency department with a 3 days history of stone in the rectum. He claimed that it had slipped into the rectum beyond his grasp while he was using it to push prolapsed piles back. He complained of pain in lower abdomen and anal region with no history of bleeding per rectum and urinary symptoms. On examination he had lower abdominal distension and increased bowel sounds on auscultation but there were no signs suggestive of peritonitis. On digital rectal examination anal tone was decreased but the stone could not be felt.

Plain X-ray of the abdomen showed a foreign body in the rectum that reached up to the pelvic brim (Figure 1).An attempt to remove the stone manually under sedation was unsuccessful. Consequently, a laparotomy was done and foreign body retrieved through an incision made on anterior wall of rectosigmoid region. Stone was rectangular in shape with one pointed end (Figure 2). A protective diversion colostomy was done. Contrary to the patient's claims, there were no haemorrhoids.

The postoperative period was uneventful. Psychiatric consultation was also arranged for the patient. He was discharged after two weeks with advice to come for closure of the colostomy after six weeks.









Figure 1. Plain X- Ray depicting Foreign Body in the Pelvis (Rectum).



Figure 2. Retrieved Foreign Body (Stone)

Discussion

Foreign body in the rectum no more constitutes a rare problem. Cases of foreign body within rectum are commonly reported from Eastern Europe and usually uncommon in Asian population⁴. Men have the higher incidence compared to women⁴ and the rectum and sigmoid colon are the commonest site for the lower gastrointestinal tract foreign bodies. The objects homosexuals' inserts into their rectum are only limited by the capacity of their rectum, not their imagination⁵. A total of 80% of these events occur for sexual stimulation and in 10% cases it is forcibly introduced during sexual assaults⁶. These patients typically present to the emergency department in delayed fashion because of embarrassment and often after multiple attempts of self removal.

A detailed clinical history and physical examination are essential for the diagnosis and management of these patients. The presentation of these patients varies from asymptomatic cases to a florid peritonitis depending upon the types of rectal foreign bodies, time of insertion, way of insertion and presence or absence of non professional intervention to remove these bodies. The most common presentation is complaint of anal pain and bleeding (66.7%) and unsurprisingly a history of anal introduction present only in 33.3% cases^{1,7}. The presence of tarry mucoid rectal discharge with necrotic odour raises the suspicion of gangrene of the rectum. Plain abdominal and pelvic X-rays are required to determine the presence, numbers, shape, size, location and direction of the foreign body which is important in planning of the extraction program⁷.



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The variety of rectal foreign body can be far beyond our imagination and requires different strategies for safe removal. Majority of the cases are treated by transanal retrieval either in emergency department with adequate sedation or by operative suite under direct vision⁴. Those in low or mid rectum up to level of 10 cm can be most often removed transanally while those above 10 cm may require laparotomy⁸. High degree of suspicion should be there especially when a lax anal sphincter with bloody rectal discharge is found on a digital examination. A cautious anorectal digital examination not only allows palpation of low lying objects but also helps in disclosing possible complications caused by foreign bodies.

Extraction of the foreign body should only be attempted after adequate relaxation of anal sphincter. Hard objects are potentially traumatic and tend to migrate upwards⁹. Abdominal manipulation and stabilisation helps in retrieval when the material is slippery. Obstetrics forceps or snares are only helpful in grasping the broad and slippery base with limited success. Larger objects can be retrieved by many ingenious methods such as vaginal spatulas, suction devices, wire and plastic snakes and uterine vulsellum⁹. A foreign body made up of glass requires special attention; efforts should be made to remove the object intact without breaking it. Utilisation of padded retractors may be helpful. Furthermore, if the open end of the glass is directed cephalad, this will cause negative pressure within the glass and draw the mucosa into the mouth of the container. One easy way of overcoming the suction effect is to introduce one or more Foleys catheter around the object and to inject air around the opening of the container after inflating the balloon of catheter. Applying traction to the catheter will help removal of the objects¹³. Colonoscopy or sigmoidoscopy is also reported with good success to retrieve the foreign body under direct vision to avoid iatrogenic injury¹⁰.

Laparotomy is only required in a case of impacted foreign body with perforation, peritonitis and associated complications. Even with the laparotomy the aim is transanal removal and closure of the operation with diversion colostomy³. Post retrieval colonoscopy is mandatory¹⁰. In our case transanal removal was attempted unsuccessfully; therefore a laparotomy was performed.

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