

## A Case Report of Rectal Foreign Body Causing Perforation

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**Abstract:** In this paper we describe a male patient who was presented to our emergency department with symptoms and signs suggestive of peritonitis, intraoperatively revealing a plastic foreign body inserted into rectum causing perforation of its upper part. He underwent trans-abdominal rectal repair and proximal fecal diversion. Patient was followed up and stoma closure was done after 2 months.

**Keywords:** Foreign body, perforation, rectum, laparotomy, transanal, fecal diversion

### INTRODUCTION

Rectal foreign bodies (RFBs) and their management have been well reported in the literature with dating back to 16th century [1]. Intentional or unintentional insertion of RFB's often poses a serious challenge on the clinician. They are inserted for diagnostic or therapeutic purposes, self-treatment of anorectal disease, by criminal assault and accident or, most commonly, for sexual purposes [2]. Most objects are introduced through anus; but sometimes, it may be swallowed, that passes through the gastrointestinal tract, and held up in the rectum [3]. Often diagnosis difficult because of reluctance of individual to seek medical help and to provide details about the incident [4].

Management of these patients may be challenging, as presentation is usually delayed after multiple attempts at removal by the patients themselves have proven unsuccessful. At times complications like perforation can occur as happened in the case described here.

### CASE PREPORT

A 30yr old male with no remarkable medical history in the past presented to our emergency department with complaints of abdominal pain and abdominal distension of 2 days duration. Per abdominal examination showed features of peritonitis. Per rectal examination revealed nothing significant. X-ray abdomen erect view showed free air under diaphragm and no other significant finding. Abdominal ultrasound reported free fluid in peritoneal cavity.

Patient was taken up for emergency laparotomy which revealed a plastic foreign body (wiper stick of a car) causing full thickness perforation of anterior wall of rectum in its upper part.



**Fig. 1: Laparotomy which revealed a plastic foreign body (wiper stick of a car)**

Rectal perforation was repaired and proximal sigmoid loop colostomy for fecal diversion was made. Post operative period was uneventful. Patient later admitted inserting foreign body per rectum for sexual gratification. He underwent a psychiatric evaluation which failed to find out any abnormality. He was followed up and colostomy closure was done after 2 months.

### DISCUSSION

Rectal foreign bodies can provide a dilemma in management for a surgeon since their type,

presentation & timing of presentation may be highly variable. Incidence of rectal foreign bodies is on the increase, especially in urban population though patient in this case was from a rural area[4, 5]. Majority of patients are males in their 3<sup>rd</sup> and 4<sup>th</sup> decades[5]. Foreign bodies settle in rectum by two ways; those inserted per anum and more rarely taken by mouth[6].

More often than not, patients presented to the emergency department have attempted to remove the RFB unsuccessfully before seeking medical care[5]. Usual complaints are pelvic pain, bleeding or mucous discharge per rectum and if complicated, abdominal pain or constipation. Since they are usually reluctant to reveal the history, it may be a good practice to rule out foreign bodies in rectum when patients present with above mentioned symptomatology.

Physical examination is intended to rule out signs of peritonitis. Per rectal examination can find out the position of foreign body from anal verge and sphincter competency. Abdominal and pelvic x-ray series should be able to tell about size, nature and position of foreign body. Further imaging is rarely required. Rigid proctoscopy may be required for those high up in the rectum. But care must be taken not to push the foreign body beyond recto-sigmoid junction.

Manual extraction transanally is successful in majority of cases. It can be done under spinal anaesthesia[1,7, 8], pudendal nerve block[1] or intravenous sedation which helps in sphincteric relaxation. Endoscopy is carried out when RFB is located high in the rectum or even in colon. Endoscopic snares[9] and gentle insufflation in the bowel to help loosen the seal around the RFB is described. Goldberg and Steele[4] suggested that downward pressure on RFB in the left iliac fossa can help in moving the object downward to the rectum.

If all the above measures fail, patient can be taken up for surgery [12]. Laparoscopic attempt have been recommended at first by some authors [13, 14]. Laparotomy may be reserved as last resort and for those who are presented with complications such as perforation and obstruction. An attempt to gently push the foreign body distally for a transanal removal could be made. Those having perforations upto half the circumference of gut may be primarily repaired with a proximal fecal diversion. In larger perforations a Hartmann's procedure may be required. There is a report of pubic symphysiotomy done for large foreign body wedged in pelvis[10].

Abdominal X-ray imaging and endoscopic surveillance of the colonic mucosa immediately after rectal foreign body removal is mandated to rule out inadvertent extraction-related injury and

perforation[1,11].Continuing resuscitation and observation, postoperative pain control, early ambulation and diet initiation upon return of bowel function should follow guidelines of any general surgical intervention.

## CONCLUSION

Rectal foreign bodies and it's management is challenging for surgeons around the globe despite a proposed systematic approach. Though most of them are managed conservatively, surgeon must be equipped for an imminent operation. In cases complicated by perforation mostly primary closure with proximal colostomy is the surgery of choice.

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