

Case Report

Perianal and rectal injury due to unusual foreign body-bell

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ABSTRACT

Perianal foreign bodies are a surgical challenge. The management of these patients requires a systematic approach which includes a careful history and examination, appropriate radiological investigations and surgical intervention. Here authors present a case of a five years old female with alleged history of fall over a bell with perianal and rectal injury.

Keywords: Bell, Foreign body, Perianal, Rectal, Trauma

INTRODUCTION

Perianal foreign bodies present a challenge to the attending surgeon as the type of object, the age of patient, time lapse from injury to presentation of the patient, associated injuries and local contamination may vary widely. Management of these patients requires a systematic approach, and the surgeon must be familiar with the management of the associated colorectal injuries and techniques of extraction of the foreign bodies.¹

In this report authors describe a case of a five years old female child who presented with an alleged history of fall over a bell.

CASE REPORT

A five years old female child presented to the emergency department with alleged history of fall from a height of approximately 2 feet, over a bell while playing. She presented within two hours of injury to our Emergency Department.

On examination, she was vitally stable. On per abdomen examination, she had tenderness in hypogastrium. Rest of the abdomen was soft. On perianal examination, the lower end of the bell commonly used in India for prayers was seen coming out from the perianal region from 6O' clock position posterior to anal opening (Figure 1). On per rectal examination, the handle of the bell was felt across the rectum. A plain radiograph of the abdomen revealed the bell (Figure 2).

In view of impacted foreign body, decision was taken to perform a laparotomy. Written informed consent was taken from the parents of the patient for surgery.

Patient was taken for laparotomy after adequate fluid resuscitation and intravenous antibiotics. On laparotomy, authors found that the handle of the bell had perforated the anal sphincters and rectum at two points and its tip was impacted in the sacrum at S1 level (Figure 3). There was fecal contamination in the pelvis.

After manipulation, the tip of the bell was disimpacted from the sacrum with difficulty and removed (Figure 4).

The perforated segment of rectum was resected, and Hartmann's procedure done. Perianal debridement at the point of entry of the bell was performed.



Figure 1: The end of foreign body (bell) entering through the perianal region at 6 O' clock position, anus seen separate from the bell.

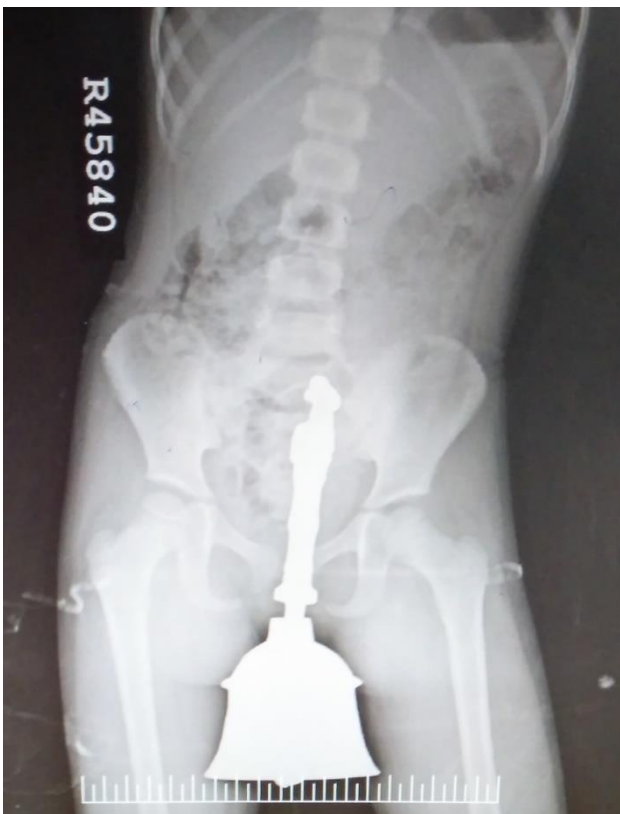


Figure 2: Abdominal radiograph showing bell.

Post operatively, the patient had an uneventful recovery. Her stoma was functioning by post-operative day 2. Perianal wound was dressed daily and had healthy granulation. She was given psychiatric counseling. The patient was discharged on Postoperative day 6. Perianal physiotherapy was advised for the patient.

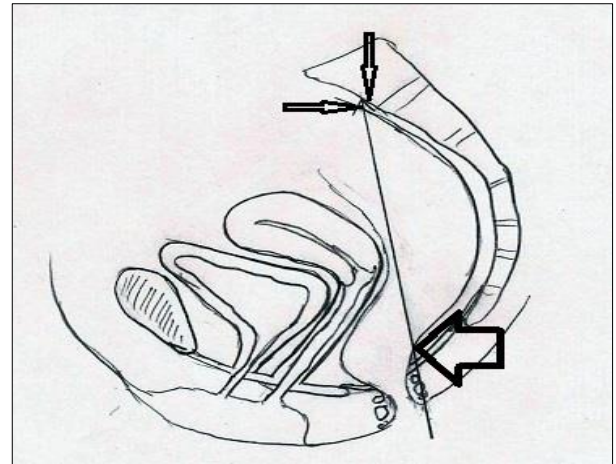


Figure 3: The axis of injury, entry point into rectum (bold arrow towards left), exit point from rectum (small arrow towards right) and entry into sacrum (vertical arrow).



Figure 4: Extracted foreign body (bell).

DISCUSSION

The management of colorectal foreign bodies can be challenging particularly with regard to choosing the most appropriate method of extraction. In patients in whom the foreign body is impacted or not easily extractable, the method of extraction has to be carefully determined. The appropriate technique will depend on the size and surface of the retained object and the presence of complications such as perforation or obstruction.¹

Rectal foreign bodies are a unique field of colorectal trauma. Appropriate approach to these patients involves a careful history to determine the mode of injury, which

also gives the surgeon an idea of the impact of the injury and possible associated injury. Additionally, a focused physical examination to assess extent of local injury and possibility of perforation; which would require an emergency laparotomy is crucial. For foreign bodies which are planned for non-operative removal, an innovative use of available instruments should be attempted. The surgeon should at all times be vigilant for delayed signs of perforation in patients in whom non-operative approach has been used. By adhering to these principles, patients with retained rectal foreign bodies can be managed safely and effectively.²

If there are any signs of peritonitis, no attempts should be made for bedside extraction of the foreign body and an emergency laparotomy should be performed after resuscitation of the patient. Colonic lacerations which involve less than half the circumference of the bowel, with minimal peritoneal contamination, a primary repair can be attempted. If the orientation and shape of the object are unfavorable, a colotomy can be made and the item can be extracted through the peritoneal cavity. The colotomy can be repaired primarily and tested for leak. Injuries involving a wider circumference requires a Hartmann's procedure. Patients with delayed presentation, significant fecal contamination, signs of sepsis and hemodynamic instability would also require a diversion procedure.³

In cases of sphincter injury, the repair should be delayed as there is local contamination. A follow-up of at least 3 months is recommended before considering any sphincter repair.¹ Perianal injuries and their repair can have long term psychological consequences on the patient. It is important therefore to involve a mental health provider in the management of the patient.

Therefore, a stepwise approach towards management of patients with perianal foreign body which includes a methodical history and examination, radiographic investigations, appropriate extraction of the foreign body with repair of associated injuries, and post extraction surveillance is essential to achieve lasting outcomes.⁴

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