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Case Report

Accidental ingestion of large foreign body retained at recto sigmoid junction: A rare case report

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ABSTRACT

Introduction: Large Foreign Bodies in recto-sigmoid are very rare. Foreign bodies found in rectum are usually are inserted as a part of erotic activities. Very rarely foreign bodies reach upto rectum due to oral ingestion; e.g. of the latter include toothpicks, bones. These patients commonly present with pain, discomfort or foreign body sensation. After failure to remove by local methods they present to doctor. Patient fail to present early due to social embarrassment and stigmas. Patient might not present with original mode of insertion due to stigma and present with unusual stories.

Case Presentation: A 52 year male presented with a complaint of abdominal pain colicky in nature since 12 hours and abdominal mass of following an episode of accidental ingestion of pestle while he was scratching his posterior pharyngeal wall..

At laparotomy, pestle was found at rectosigmoid junction, The pestle in rectosigmoid colon was removed by bimanual technique, i.e foreign body was pulled through anus and pushed through abdomen. This was a rare case of such a large foreign body ingestion and retained in rectosigmoid colon.

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1. Introduction

Large Foreign Bodies in recto-sigmoid are very rare. Foreign bodies found in rectum are usually are inserted as a part of erotic activities. In such type of cases, the objects are usually dildoes or vibrators, rarely it may include the light bulbs , candles, shot glasses and unusually large objects such as soda bottles or beer bottles.

Often, foreign bodies are inserted rectally in an attempt at hide suspicious object. Typically these objects are drug packets; rarely they may be knives or guns. Some psychiatric patients may purposefully hide sharp objects in their rectum to injure the examining provider while performing rectal examination. Elderly patients, foreign bodies are inserted for prostatic massage or to break up hard faeces and maybe lost during this activity. Sometimes foreign bodies found in rectum are initially swallowed and then transit through the GI tract. Also foreign bodies found in rectum can also result due to assault, including child abuse. Depending upon relations to rectosigmoid junction rectal foreign bodies can be high lying or low lying. This classification is important because the objects that are above the sacral curve and rectosigmoid junction are often difficult to see and cannot be removed, and often difficult to remove with rigid proctosigmoidoscopy. Low lying rectal foreign bodies are normally palpable on digital examination. Symptoms on presentation include pain, discomfort or foreign body sensation. They present to the doctor after their attempts to remove the object fail. Patient fail to present early due to social embarrassment and stigmas. Patient might not present with original mode of insertion due to stigma and present with unusual stories.

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2. Case Report

A 52 year male presented with a complaint of abdominal pain colicky in nature and per abdominal mass of 12 hours of duration following and episode of accidental ingestion of pestle while he was scratching his posterior pharyngeal wall. Patient gave negavtive history of vomiting, diarrhea, fever or bleeding per rectum. Patient have an absent right side of mandible due to commando surgery performed 6 years back for which right side pectoralis graft was taken. General and systemic examinations were essentially normal. On examination there was a approx. 15*5 cm vertically oval mass, with well-defined border, was seen in right iliac and right lumbar region of abdomen. Consistency was hard. There was no organomegaly. Abdomen was dull on percussion, and there was no fluid in abdomen. Bowel sounds were increased on auscultation. On per rectal examination, no hard structure palpated. There was no active bleeding. There were no perianal bruises. Anal sphincter tone was normal. Proctoscopy was normal. There was no sign of pneumoperitoneum or signs of peritonitis. 1-15

2.1. Investigations

Erect X ray abdomen revealed a radio opaque rod like structure in right lower side of abdomen. Laboratory test were suggestive of normal CBC, coagulation profile, renal function test and liver function test.

2.2. Therapeutic intervention

Pestle failed to be delivered through rectum. So patient was taken for laparotomy under general anesthesia through sub-umbilical midline linear incision. The pestle in sigmoid colon was removed by bimanual technique, pushing it through the abdomen and pulling it through the anus. Postoperative usg had no evidence of peritonitis or free fluid. The post-operative period had no adverse effects.

3. Discussion

The incidence of rectal foreign bodies is different from region to region, rare in Asia and most common in Eastern Europe. They can be seen in as young as 20s (mostly for eroticism) to as old as 60 s (mostly for the therapeutic purposes), with a mean age of 41 years. Anorectal foreign bodies are common in males than in females.

Depending upon relations to rectosigmoid junction rectal foreign bodies can be high lying or low lying. This classification is important because the objects that are above the sacral curve and rectosigmoid junction are often difficult to see and cannot be removed, and often difficult to remove with rigid proctosigmoidoscopy. Low lying rectal foreign bodies are normally palpable on digital examination. Difficulty in removal is found if there is mucosal edema



Fig. 1: Plain X ray abdomen shows radio-opaque shadow obliquely in right lower side.



Fig. 2: Pestle in the rectosigmoid through the laparotomy incision.



Fig. 3: Extracted pestle

and muscular spasm which develops due to delayed presentation. Complications include Rectal laceration and perforation.

As per Barone et al. assigned prognostic categories based on levels of injury.

- 1. Category I: Retained foreign body without injury.
- 2. Category II: Retained foreign body with mucosal
- 3. laceration.
- Category III: Retained foreign body with sphincter injury.
- 5. Category IV: Retained foreign body with rectal perforation.

The first step in evaluation and management of a patient with rectal body is to rule out rectal perforation and peritonitis by means of Physical examination, X-ray and CT Scan. The plain radiography helps to localize the object and rule out free air.

Usually first line of management is conservative if foreign body is visible and possible to remove with digital examination and patient is stable. Fragile foreign bodies and sharp objects need special care to remove them intact. If end of the bottle is being grasped, pad the end of forceps to avoid breakage. The object needs to be maneuvered according to the sacral curve for removal. If the suction created by the rectal mucosa is hindering removal, a Foley's catheter method of removal can be used. Sometimes foreign objects are removed by unconventional methods such as use of vacuum extraction device, plaster of Paris or obstetrics forceps. Post removal colonoscopy or sigmoidoscopy may be done to see for mucosal injury. Colonoscopy for removal of rectal sigmoid foreign bodies failed to remove by digital maneuver has high success rate. Exploratory Laparotomy is only required when impacted foreign body and or with perforation peritonitis. The laparoscopic approach is also a good treatment of choice for difficult cases. Advantages of exploratory laparotomy are it allows easy removal, detection of rectal injury, and early discharge. If perforation is present then primary repair, proximal loop colostomy, sigmoid end-colostomy and the Hartmann procedure, in combination with administration of wide spectrum antibiotics according to the severity of peritoneal contamination, can be performed. The mortality and morbidity rates of patients presenting with perforation above the peritoneal reflection of rectum have been reported to range from 2.5 to 20.0%16 and 20.0 to 40.0%.

4. Conclusion

Large Rectum foreign bodies due to accidental ingestion are unusual; Such patient either gives unclear false history or having underlying psychiatric disorder which makes this a rare case reports, such large foreign bodies are difficult to diagnose and, so no single procedure is recommended. For proper diagnosis proper physical examination followed by X-ray. USG and CT if needed are mandatory to localize the object, and know its size, so that a correct management can be planned. During removal of foreign body we must ensure that further damage is not done. Laparotomy still has a place in removal of very large foreign bodies.

5. Consent

Consent has been taken from the patient.

6. Author's Contribution

All the authors contributed equally in treatment, management, and follow up of the patient and in compilation of case report.

7. Source of Funding

None.

8. Conflict of Interest

None.

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