



A Sundry Of Foreign Bodies

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Abstract

Introduction: Foreign objects in human body is one of the less common presentations in the emergency department and has a variety of etiologies. Our aim is to study the mode of injury, clinical presentation, diagnosis and surgical intervention and outcomes associated with foreign bodies.

Materials And Methods: The study includes the patients who presented with foreign body between June 2020 to June 2022 at the emergency department of tertiary teaching hospital in Coimbatore, Tamilnadu .

Results: A total of 5 patients were evaluated comprising of four males and 1 female. One patient underwent laparotomy and sigmoid colon perforation was seen, one went for total penectomy and other three taken for exploration and foreign body retrieval.

Conclusion: Despite being a rare complaint in routine emergency and having no defined incidence, cases of foreign bodies have increased in number, mainly due to auto-erotic causes of recent times. Timely intervention is needed to prevent complications.

Keywords: FOREIGN BODY, SEXUAL GRATIFICATION, SURGERY

Introduction

Foreign bodies are difficult to diagnose and manage in the emergency department, this cases which were very rare in the past have now increased in number in recent years. The annual incidence reported as 1 per 1 lakh people however the actual incidence of self-inserted foreign bodies is unknown because the patient only presents at the emergency department if

they cannot remove the foreign body or if acute pain develops. In addition, the patient may be reluctant to tell the truth at the emergency admission which may lead to a delay in detailed assessment and diagnosis. The aim of the study was to retrospectively evaluate the patients who were admitted to the emergency

department with unusual foreign body and discuss the findings according to the relevant literature.

Materials And Methods

The study includes the patients who presented with foreign body between June 2020 to June 2022 at the ED of tertiary teaching hospital of Coimbatore, tamilnadu. Patient information was obtained retrospectively from patient files and cases with incomplete data were excluded from this study. The patients were evaluated in terms of age, gender, foreign body type, clinical finding, imaging methods whether the surgery performed, how the foreign body was removed. The cases were evaluated in terms of whether the foreign body could be removed in the emergency department.

Figure 1

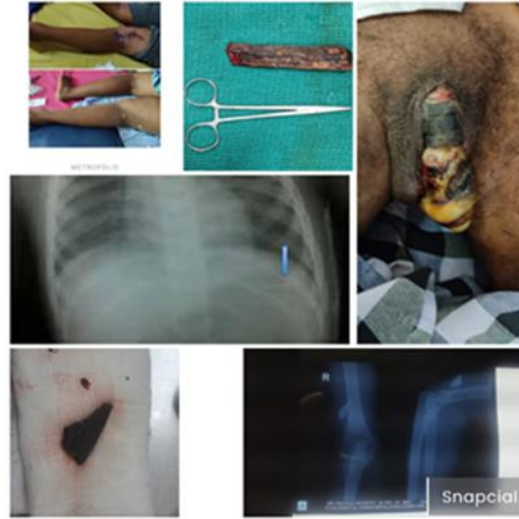


Table.1: Demographic And Clinical Charecteristic Of The Case

PATIENT	AGE	GENDER	FOREIGN BODY	CIRCUMSTANCE OF INSERTION	CLINICAL FINDINGS	IMAGING METHOD	TREATMENT
1	50	MALE	PLASTIC RIM	SEXUAL STIMULATION	GANGRENOUS PENIS	-	TOTAL PENECTOMY AND PERINEAL URETHROSTOMY
2	22	MALE	HAND SHOWER IN RECTUM	SEXUAL STIMULATION	ABDOMINAL PAIN	ABDOMINAL RADIOGRAPHY	EMERGENCY LAPOROTOMY AND SIGMOID COLOSTOMY
3	15	MALE	WOODEN PIECE IN POPLITEAL FOSSAE	ACCIDENTAL	SWOLLEN THIGH AND INABILITY TO WALK	TW-MRI	EXPLORATION AND FOREIGN BODY RETRIEVAL
4	45	FEMALE	INSULIN SYRINGE NEEDLE	ACCIDENTAL	ASYMPTOMATIC	ABDOMINAL RADIOGRAPHY	EXPLORATION AND FOREIGN BODY RETRIEVAL
5	38	MALE	STONE IN	ACCIDENTAL	OPEN	RADIOGRAPHY OF	EXPLORATION AND

			RIGHT ARM	L	WOUND	LOCAL PART	FOREIGN BODY RETRIEVAL
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Results:

A total of 5 patients were evaluated comprising of four males and 1 female and are shown in figures. The foreign body was found to be used for sexual gratification in two cases and accidental in other 3 cases. In this study, one patient was asymptomatic and others were symptomatic. For the diagnosis radiological investigations like X-rays and MRI used for three cases and clinical evidence for other cases. Among them, one patient underwent laparotomy and sigmoid colon perforation was seen, one went for total penectomy and other three went for exploration and foreign body retrieval. All the patients were discharged after clinical improvement was observed, no morbidity and mortality were observed in any of the patients.

Discussion:

Retained foreign objects are a rare complaint in the emergency department, but an increasingly important occurrence in recent years. A Caribbean study conducted in hospitals over 5 years revealed an incidence of approximately 0.15 cases per 100,000 population/year, but exact frequency data is not known. Despite being a problem that affects both genders, in the literature consulted there is a predominance of males, at a ratio of 28:1 to females, more specifically white men between 20 and 40 years old, having practices of sexual gratification as the greatest motivation. A huge variety of objects have been described, with a greater predominance of those of a sexual nature, followed by accidental and incidental, which should be handled with greater care due to their fragility and risk of injury if broken. Generally, most patients, because of embarrassment, only present for medical attention after several unsuccessful attempts to remove the object alone, resulting in an average calculated delay of 1.4 days to seek help.

A good history should evaluate the nature of the inserted object, as well as the way of insertion, to decide the best way of removal, taking into account the material, size, and location of the object. Physical examination should include inspection, palpation, and

abdominal auscultation to evaluate transabdominal palpable objects and rule out signs of peritonitis.

Although the digital rectal examination is essential for diagnosis, as it provides data on the presence, size, and location of the object, in addition to assessing the state of the anal sphincter, an abdominal radiograph should be performed before its performance to rule out the presence of sharps or glass objects in the rectum, thus avoiding secondary injuries to the patient and the examiner.

Imaging tests are mandatory to confirm the diagnosis, with anteroposterior and lateral radiographs of the abdomen and pelvis being the most commonly requested to confirm the presence, number, and location of rectal objects, in addition to checking for the presence of free air.

Chest X-ray should be considered in the initial evaluation to exclude pneumoperitoneum. Other imaging tests such as non-contrast computed tomography are important in the evaluation of non-opaque rectal objects, as well as assisting in suspected cases of intestinal perforation.

Laboratory tests are not essential in the initial evaluation unless there are signs of peritonitis and preoperative preparation is required.

In radiographic examinations performed in our patient, findings of distention of the descending, transverse, and ascending colon loops with the presence of a non-radiopaque hand shower foreign body in the rectosigmoid transition, but without signs of pneumoperitoneum or perforation.

Although there is no consensus regarding the most appropriate removal technique, less invasive initial approaches are recommended. Studies suggest a 60–75% success rate for manual extractions under local anesthesia. Several techniques can be used if the patient is stable, with a bimanual extraction attempt being initially performed with the patient in the appropriate position, and if the patient is calm, collaborative, and tolerates the procedure without the need for sedation, there is an advantage in asking to be performing the Valsalva maneuver actively at the

correct time, other techniques include the use of forceps and finally endoscopic assistance.

Emergency explorative surgical approach like laparotomy or exploratory laparoscopy should be reserved for cases of failure or for patients presenting with instability, fever, severe pain, or signs of peritoneal irritation that may indicate perforation. In the case of the patient, despite the location of the object being considered high, manual trans anal extraction was chosen, inserting the surgeon's forearm with some difficulty, without post extraction complications.

Postoperative follow-up depends on several factors, from the patient's clinical condition, associated comorbidities, presence or absence of problems due to delay in seeking care, and possible trauma-related to removal.

Conclusion:

Before choosing the extraction method the patient should be evaluated carefully with appropriate clinical and radiological investigations. Despite being a rare complaint in the routine of emergency and having no defined incidence, cases of foreign bodies have increasing numbers, mainly due to auto-erotic causes. The clinical history can be confusing, due to the patient's fear of reporting the Early diagnosis and timely intervention is needed to prevent unnecessary complications and better prognosis. Psychiatric counselling must be given in a case of sexual perversion

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