Ali Kamali (MD)<sup>1</sup> Emadoddin Moudi (MD)<sup>\*2</sup>

1. Department of Surgery, Shahid Beheshti Hospital, Babol University of Medical Sciences, Research, Iran.

2. Cancer Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran.

\* Correspondence:

**Emadoddin Moudi**, Clinical Research Development Center, Shahid Beheshti Hospital, Sargord Ghasemi Street, Shahid Keshvari Square, Babol, Iran.

E-mail: bcrdc90@yahoo.com Tel: 0098 11 32256285 Fax: 0098 1132256285

Received: 15 May 2016 Revised: 17 July 2016 Accepted: 26 July 2016

# Unusual presentation of an abdominal foreign body: A case report

## Abstract

*Background:* Insertion of rectal foreign bodies intentionally or unintentionally is not unusual.

*Case presentation:* A 19-years-old unmarried male was admitted to our hospital due to a lump of left lower quadrant of abdomen. He denied sexual assault .The abdomen was soft on physical examination. Abdominal x-ray and CT scan showed a foreign body in lower abdomen and pelvis. The patient was operated and a slice of glass was extracted.

*Conclusion:* In patients with rectal foreign body, the history is not always reliable and sexual assault may deny. The foreign object inserted in the rectum may migrate to peritoneal cavity without peritonitis.

Keywords: Foreign body, Sexual assault, Rectal

#### Citation:

Kamali A, Moudi E. Unusual presentation of an abdominal foreign body: A case report. Caspian J Intern Med 2017; 8(2): 126-128.

nsertion of rectal foreign bodies intentionally or unintentionally is not unusual and often causes a challenging problem for the clinicians. Most commonly the event occurs for sexual gratification but objects can be inserted for diagnosis or treatment and via criminal act (1). Depending on social and cultural conditions, patient's history may mislead clinicians (2). We introduced a patient with unusual presentation and unreliable history.

## **Case presentation**

A 19-year-old unmarried male was admitted to our hospital due to a lump of the left lower quadrant of abdomen. He was alert and completely oriented. The patient had no fever, nausea and vomiting. In past history, he made a pretense that he got injured with multiple pieces of glass in a car accident two months ago. The patient denied any rectal abuse. On physical examination, no scar was seen on the body, the abdomen was soft, without rigidity and sharp  $2 \times 2$  cm mass was palpable in the left lower quadrant, 3-4 cm medial to left anterior superior iliac spine (figure 1). In digital rectal examination, there was dense mass with intact mucosa anteriorly. Complete blood count was normal and urine analysis was without hematuria and pyuria. Abdominal x-ray was performed and showed semiopaque foreign body in the lower abdomen (figure 2). CT scan without contrasts demonstrated location of the foreign body better than the plain x-ray (figures 3, 4). According to physical examination, lab data and images of the foreign body was located in extravesical and extraperitoneal space, so we preferred open surgery to laparoscopic procedure. The patient was operated with general anesthesia and intraperitoneal low midline incision. A piece of blade-like glass was found during surgery which passed from extraperitoneal to intrapertoneal space and then subcutaneous tissue (figures 5, 6). It was extracted from the abdomen without problem.



Figure 1: before surgery photography



Figure 2: X-ray of abdomen shows a semiopaque foreign body in lower abdomen



Figure 3: Abdominopelvic CT scan demonstrates foreign body posterior to bladder



Figure 4: Abdominopelvic CT scan indicates foreign body in pelvis



Figure 5: Intraoperative photography reveals a slice of glass in abdominal cavity



Figure 6: Knife - shaped glass extracted from the abdomen

# **Discussion**

Foreign bodies are comparatively rare, but they are critical and fatal (3). Abdominal foreign bodies can happen by swallowing, insertion via rectum after abdominal surgery or penetrating traumas. Complications of the foreign bodies are gastrointestinal tract perforations, peritonitis, intestinal obstruction, hepatic abscess and migration to abdominal wall (4, 5). Ingestions of foreign objects are frequent in children or adults with mental retardation (3). Nearly 80 to 90 percent of swallowed foreign bodies evacuate via the rectum and the rest require intervention (6).

In our case, ingestion of the glass is impossible to reach the rectum because of length of the ingested foreign body prevents to move to distal gastrointestinal tract. After abdominal surgery, the sponge is the most common surgically retained foreign body described as gossypiboma (7-9). Three risk factors were established to increase its occurrence including obesity, emergency surgery and unplanned change in the operation (7). Intra-abdominal retained foreign bodies should be removed either through an open surgery or via laparoscopic procedures (10). Our patient did not have any history of surgery so we rejected this cause. In our patient, despite his claim, we think that no car accident happened because the foreign object was a building glass and no scar was seen, so glass penetration was a rejected caure. Rectal foreign body insertion was divided into sexual versus non-sexual and voluntary versus involuntary (11).

More than two-thirds of patients with this kind of event are men – related in ther third and fourth decades (12). Involuntary sexual foreign bodies are almost exclusively in the domain of rape and sexual assault (12). Foreign bodies used for sexual purposes are usually blunt and as phallic in shape and size (13). In our investigation, we ignored sexual pleasure due to shape of the glass. Victims of sexual assault may present with objects of varying caliber, and they may be sharp (13). In our case, certainly someone inserted the sharp glass in the rectum, then the mucosa repaired gradually. The glass silently migrated to peritoneal space and then subcutaneous tissue. He denied sexual assault based on social and cultural backgrounds.

## Acknowledgments

We would like to thank Sakineh Kamali Ahangar, staff of the Clinical Research and Development of Shahid Beheshti Hospital for editing the report. Conflict of Interest: None declared.

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