

# Ingested foreign bodies in the stomach and small intestine

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## Citation

K Anand, M Tripathi. *Ingested foreign bodies in the stomach and small intestine*. The Internet Journal of Surgery. 2008 Volume 18 Number 2.

## Abstract

To find foreign bodies inside the gastrointestinal tract is rare. Often these patients have psychiatric problems. We present a case report of a 30-year-old male with incidentally diagnosed foreign bodies inside the gastrointestinal tract. A self-inflicted, deep incised wound in the anterior abdominal wall demanded a plain X-ray of the abdomen, which lead to the attention of the foreign bodies. The present case highlights the clinical presentation, importance of psychiatric treatment and relevant literature.

## INTRODUCTION

Chronically ingested foreign bodies are usually asymptomatic. Foreign bodies in the gastrointestinal tract are rare in a common population and their presence warrants proper evaluation. This can usually be done endoscopically or by open surgery. As many as 2533 foreign bodies have been reported from the stomach of a single patient.[1]

Removal of sharp or large objects should be considered. Recognized dangers include aspiration of the foreign body during removal, and rupture of drug-containing bags in "body packers." Both complications can be fatal. Surgical removal is recommended in body packers, and in patients with large jagged objects. Here is a case of incidentally diagnosed intra-abdominal foreign bodies in a 30-year-old male, who was a previously diagnosed with major depression.

## CASE REPORT

A 30-year-old male presented in the emergency department with alleged history of a self-inflicted incised wound over the anterior abdominal wall. At the time of presentation, the patient had stable vital parameters with an open wound of about 15 x 1.5cm without any breach in the peritoneum in midline abdomen. On detailed history, the patient was on antidepressant treatment with poor compliance for the last 2 years for major depression and had attempted suicide earlier. To rule out any bowel injury, an X-ray of the abdomen was done, which revealed radio-opaque foreign bodies inside the abdomen (in left hypocondrium and pelvic region) with no convincing evidence of pneumo-peritoneum (Figure 1).

## Figure 1

Figure 1: Plain X-ray of the abdomen showing foreign bodies in stomach and suprapubic area



The patient was managed conservatively at initial presentation. Subsequently, elective laparotomy was done. Fourteen sharp metallic foreign bodies (Figure 2) were retrieved through gastrotomy and three via enterotomy about 2½ feet proximal to the ileocecal junction.

**Figure 2**

Figure 2: Retrieved intra-abdominal foreign bodies



Postoperative outcome was uneventful. Psychiatric consultation was taken and the patient was discharged on antidepressant treatment in form of Fluoxetine. At present, after two years of follow-up, the patient is doing well with elevated mood and self esteem.

## DISCUSSION

Acute abdomen is a common surgical presentation in a patient of trauma. Self-inflicted abdominal stab wounds are uncommon. Self-inflicted wounds can induce significant although most likely non-lethal abdominal and retroperitoneal injuries.<sup>[2]</sup> Self-inflicted wounds should lead the attention of the treating surgeon towards any psychiatric component. There should be a specific protocol for the management of such acute emergency cases: (a) resuscitation, (b) comprehensive and complete history, (c) thorough clinical examination, (d) important, rational and precise investigations, (e) final diagnosis, and (f) judicious intervention. Psychiatric patients need special attention. Previous scars of self-inflicted cuts, history of ingestion of foreign bodies, attempted suicide and any psychiatric treatment should raise the suspicion of a psychiatric component. These patients need long-term anti-psychotic treatment to avoid recurrence after initial surgical management. In cases of self inflicted abdominal stab wounds, an open abdominal wound with peritoneal breach justifies exploration. The cardinal features of peritonitis (tenderness, guarding, rigidity) may or may not be present. Basic imaging modalities as X-ray and abdominal USG are enough to reach diagnosis and decision. At times, one may find incidental foreign bodies in these basic investigations. Higher investigations not only impart a financial burden on

the patient but also delay timely management. For a stab injury of the abdomen, exploratory laparotomy is warranted. Retrieval of gastrointestinal foreign bodies through endoscopy is a controversial aspect as there are chances of failure<sup>[3]</sup> and aspiration during foreign body removal. Exploratory laparotomy and surgical removal is justified by the study conducted on 167 patients by Barros et al.<sup>[3]</sup> who reported surgical intervention in 30% of the cases. Such foreign bodies should be removed because they can present with complications such as perforation, intestinal obstruction, intestinal bleeding and even visceral abscesses<sup>[4,5,6,7]</sup>.

Recurrent episodes of foreign body ingestion may occur, especially in prisoners<sup>[8]</sup>, psychiatric patients, and patients with peptic strictures with a rate of 2.7-10 %<sup>[9,10]</sup>, but the presence of foreign bodies inside the gastrointestinal tract does not prove the patient to be psychotic as there are some other patient groups as well with foreign bodies in their gastrointestinal tract as (1) children who accidentally put foreign bodies inside their mouth, (2) workmen putting nails, screws, batteries in their mouth in the course of their work, and (3) a group of patients who ingest medical appliances.<sup>[11]</sup>

## CORRESPONDENCE TO

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