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SURGICAL IMAGES

Ingestion of an unusually high number of foreign bodies in a mentally ill man



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Summary The vast majority of ingested foreign bodies (FB) can pass through the digestive tract without major incidences. In some cases, they accumulate in large amounts in the stomach. They can also perforate the gastrointestinal wall and migrate to extraluminal sites, remaining quiescent for many years. We report a case of a psychiatric patient with more than 100 ingested FB in the stomach.

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Case

A 38-year-old male with a history of schizophrenia was admitted to our hospital with symptoms of severe abdominal pain. For the past five years, he had ingested many objects that required three laparotomy procedures, and two years earlier, he had an episode of mediastinal abscess caused by a foreign body (FB) ingestion that required surgery.

On admission, the patient had stable vital signs. The abdominal plain X-ray showed the presence of numerous radio-opaque FB (Fig. 1A). An exploratory laparotomy revealed gastric dilatation and a perforation in the proximal portion of the duodenum caused by an unfolded paper clip.

A gastrotomy exposed a mass of 102 objects (Fig. 1C). After surgery, a FB remained in the left paravertebral region from lumbar vertebrae L1 to L3, but because of its location, no attempts were made to remove it. The patient was transferred to the ward in stable condition and discharged one week later to be admitted in a psychiatric institution.

About two weeks later, a new X-ray study and a CT scan showed that the paravertebral FB was adjacent to the iliopsoas muscle. The patient kept swallowing metal FB on more occasions that required their removal by means of gastroscopy. The foreign body located in the left paravertebral region remained stable (Fig. 1B) during eight years, until the patient died of lung carcinoma when he was 46 years old.

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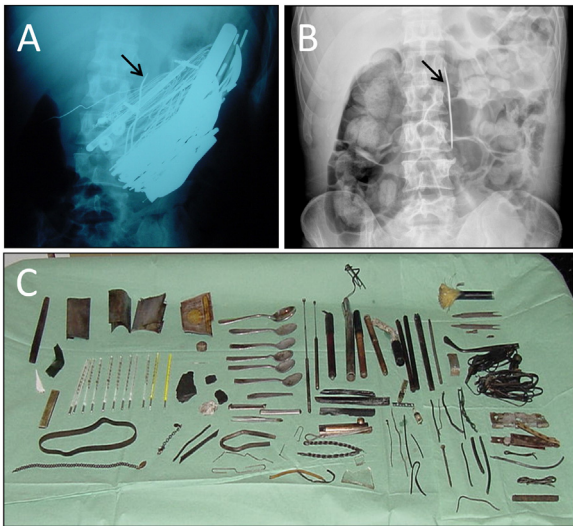


Figure 1. A. Plain abdominal X-ray showing multiple foreign bodies in the stomach. The arrow indicates the foreign body that migrated extraluminal towards the left paravertebral region. B. Plain X-ray made eight years later, showing the migrated foreign body was still in the same place. C. Picture showing the cleaned and sorted objects removed from the stomach.

Discussion

Ingested FB bodies are usually excreted naturally from the gastrointestinal tract without relevant complications [1]. It is not clear how, in cases such as ours, a large number of objects may remain in the stomach for a long time without producing any relevant complications. Intestinal perforation, as in our case, occurs in only about 1% of the patients, more frequently in the stomach.

Extraluminal gastrointestinal migration of swallowed FB is rare compared with the total number of FB ingestions. Migrated FB may remain quiescent, but it can also cause life-threatening complications [2]. In the reported situation, despite the large amount of ingested FB, only one object migrated towards the left paravertebral region and remai-

ned there for eight years without causing any problems. The exact mechanism of perforation and migration is unknown, but gastric and intestinal peristaltic movements may play an important role. This case shows how a large amount of FB may be tolerated in the stomach for a long time and that migrated FB may stay quiescent without causing any problems.

Key principles of management in patients with mental illness include maintaining a safe environment and attempting to prevent future episodes of FB ingestions using pharmacological and psychosocial management. The emergency team usually focuses on retrieving the FB, whereas the psychiatric aspect of the problem is often neglected. Since there is a high risk of recurrence of such behaviour, psychiatric assessment and care are crucial in managing these patients [3]. In our case, the patient was discharged from our hospital and referred to a psychiatric institution, where he was kept under psychiatric treatment and received postoperative care.

Disclosure of interest

The authors declare that they have no competing interest.

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