

A Surgical Knife Ingestion in a Psychiatric Patient; A Rare Case Report

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1. Introduction

Foreign body ingestion is a usual condition in children and infrequent in adults; when it occurs, it is more common seen in convict and psychiatric patients^[1, 2]. Management of these patients is especially composite^[1, 3]. When a sharp edge object like a knife is ingested, need urgent treatment is needed otherwise can cause complications or can cause severe morbidity and mortality. When dealing with these patients close follow-up along with medical therapy in psychological therapy is importance. In this report, we present a rare case of surgical knife lodged in the stomach as a result of ingestion.

2. Presentation of Case

A 31 year old male prisoner psychiatric patient came to our PDU Govt civil hospital rajkot with abdominal pain n vomiting after alleged history of surgical knife ingestion which was done forcefully by known person, abdominal pain which is sudden in onset mild dullching and no any aggravating, radiating factor n relieved by medication.

Patient also complaining of 2 episodes of vomiting which was non projectile, non bilious and containing food particle mixed with scanty amount of Blood.

No h/o abdominal distention, constipation, blood in stool, Per/abdomen-soft, non-tender, no guarding and rigidity Vitally stable.

Investigation

Blood investigation-WNL
Chest XrayPA view-NAD

Abdominal X- Ray standing

A preoperative plain abdominal radio-graph did show radiopaque foreign body (surgical knife) found over epigastric region at the level of 11 vertebrae. The proximal oesophagus was not dilated and there were no signs of perforation, and therefore the patient was taken to the operating room for possible endoscopic removal under general anaesthesia.



Figure 1: Abdominal x-ray shows surgical knife in the stomach

3. Treatment

After general anesthesia patient was positioned supine with a pillow under the shoulders and the neck hyper extended. endoscope connected to a light source and to a video camera were used to access the hypo pharynx and obtain a manifested view of the operative field on a television screen. Once the lower esophageal sphincter was entered, the A 2.5 cm size metallic sharp object (surgical knife) was visualized at partially inside stomach wall at antrum anteriorly. Endoscopically removed a foreign body by the use of magnet, Post-procedural endoscopy showed an area of mucosal erosion in site of impaction, but no evidence of perforation.



Figure 2: Shows endoscopic removal of surgical knife

4. Discussion

A foreign bodies ingestion is a usual condition in common practice. Mostly this is a accidental and happens usually in children ^[1]. In inmates mostly ingestion of foreign bodies usually happens to achieve to indoor in hospital or as a suicide purpose. The inspiration behind this circumstance is often depressive n manipulative ^[1,2]. Foreign body ingestion is for self harm purpose is infrequent because it is painful, it takes so much time to termination with dead and majority of cases are not successful, and hence, the sufferer usually used for other suicide technique ^[3, 4]. for Self – blame attempt victim was use foreign object like button batteries, blades n coin. ^{1, 3}

big, ovale objects such as coins can get trapped in the gastro esophageal junction; when sharp objects are ingested, they are usually trapped at areas of narrowing like a duodenal loop, ileocecal junction, in abdominal tumors, hernias, adhesion bandor intestinal resections. Perforations occur usually in these type of narrow anatomical areas ^[1, 3, 4]. In our patient, the surgical knife were removed without any complications. Small objects (diameter less than 2.5 cm and length less than 6 cm) will usually goes through the small intestine and the majority will pass spontaneously (80%) within a week. ^[1, 5]

The first management of foreign body ingestion is endoscopic remove and when it fails, there is a higher risk of gastrointestinal perforation, surgery couldn't be late in these events ^[1, 6, 7].

If any perforation was there, the foreign body may lodged in the gastrointestinal lumen or the site of perforation, it can be found free in the peritoneal cavity ^[4, 7]. Symptoms of perforation by foreign body's are nonspecific and can mimic

other causes of abdominal pain, including appendicitis, ureteric colic, inflammatory masses, and among others ^[1, 8].

The management of intentional foreign body ingestion in the psychiatric population is multifactorial not only because cooperation from these patients is difficult but because they can have a potentially Life – threatening behaviors that need urgent medical attention. The role of the medical team and family support is important when dealing these type of patients. Cognitive-behavioral interventions, medical, pharmacological are necessary to achieve the long-term objective of patient safety.

5. Conclusion

Surgical intervention occurred in only (4%) patients with sharp foreign body ingestion's, and 79% of the patients required no intervention. Upper gastrointestinal larger foreign body should be removed endoscopically when possible.

While foreign body ingestion is common in children n psychic patient the large majority of swallowed foreign bodies will pass through the GI tract without complication. Identification of those patients and foreign bodies that are mostly occurred with complications is important. These involved patients with cases of medical or surgical abnormalities of the gastrointestinal tract, those with symptoms n sign, and those with previous complications of foreign object ingestion.

Button batteries, long objects, or those that are sharply pointed or with a sharpen edge, are most prone to complication. Appropriate investigation also helps recognize which patients are at risk of complication. Involving an appropriate treatment in higher-risk situations is often helpful; some patients will need endoscopy for removal or other procedures, while others will require additional monitoring. Serious complications, such as gastrointestinal perforation, may require surgery. Prevention strategies may help decrease foreign object ingestion.

Conflict of interest: Nil declared

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