Case Report

Swallowed Foreign Object in Adult Psychiatric Patient: A Case Report

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ABSTRACT

Swallowing of foreign objects is rare among adults with few patients requiring intervention. We present a patient with psychiatric disorder who swallowed a foreign object and was complicated by peritonitis secondary to gastric perforation.

INTRODUCTION:

Foreign objects can be swallowed accidentally or intentionally. Majority of swallowed objects occurs in children which is usually accidental, while adult cases are rare and occur mostly in psychiatric patients. There are about 80% of the patients who are asymptomatic with spontaneous passage of swallowed object, while about 20% are symptomatic and require intervention. The clinical presentation and management depends on the size, shape, nature and location of objects. There are guidelines for management of swallowed objects in children which some of the principles can be applied to the adult patients. The swallowed objects in children which some of the principles can be applied to the adult patients.

CASE REPORT

We present a 38-year-old lady who presented in surgical clinic at Modibbo-Adama University Teaching Hospital, Yola on account of recurrent abdominal pain of 6 months duration, generalized colicky, and worsens on feeding. Pain started a day after swallowing a cutlery (Fork). (Figure 1). No associated emesis, abdominal distension and patient has normal regular bowel motions. She was treated using herbal medications. She is a known schizophrenic patient not regular on medical treatment. Clinical examination revealed a lady in mild painful distress, pale but a febrile, not dehydrated with normal vital signs. Abdomen was flat with tenderness at the epigastric and right hypochondrial region, no guarding and had normal bowel sounds.

An abdominal X-ray revealed the swallowed fork at the epigastric region and extends towards the right lower quadrant of the abdomen. The patient had routine



Figure 1: Cutlery (fork) in plane X-ray Erect

Figure 2: Postoperative cutlery (fork)

haematological and biochemistry test which revealed a packed cell volume of 24%, blood grouping and cross match was done and patient transfused 2 units of blood.

The patient had laparotomy under general anaesthesia with intra-operative finding of the fork within the stomach and perforation along the lesser curvature of the stomach by the handle of the fork which was within the lesser sac. Gastrostomy and extraction of the cutlery was done (Figure 2), perforation repaired by simple interrupted sutures and gastric incision repaired in a similar fashion. The peritoneal cavity was lavage and peritoneal drain inserted via a stab incision at the right hypochondrium, and the peritoneal cavity closed en-mass. The postoperative period has been uneventful patient commenced oral sibs 3 days postoperative and was discharged 12th day post-operative. The patient was subsequently managed for the Psychiatric disorder in the out-patient clinic.

DISCUSSION

Swallowing of foreign objects is common among children especially between the age of 6 months and 6 years, it rarely occurs in adults and when it does it occurs mostly in patients with mental retardation or psychiatric disorders. This is similar to the patient in this study who has an underlying psychiatric illness. Swallowed foreign objects varies widely in size and shape with objects like fish bone, dentures, pin, toothpick, impalements among the commonly swallowed objects. The Most common swallowed foreign object in the paediatric population globally is the coin, similarly in Nigeria it has been reported to be the commonest ingested foreign object in children, however, in adults, swallowed objects are variable. 5,7

The clinical presentation varies widely ranging from gastrointestinal, respiratory and nonspecific symptoms. The majority of patients being asymptomatic with objects passed out in faeces, while only about 20% of the patients present with symptoms especially when it results in obstruction of the gastrointestinal tract. Swallowed objects that fail to pass through the gastrointestinal tract are usually impacted in the oesophagus. This is because the oesophagus is the narrowest part of the gastrointestinal tract, however, most swallowed objects that passes to the stomach usually passes out spontaneously, but large objects like the one swallowed by the index patient my fail to pass through the pylorus or negotiate the duodenum.² The retention of objects in the stomach is not so common occurring in about 5% of patients.⁶

The use of radiographs can confirm the diagnosis and help localize radio-opaque objects like in the case of this patient. Hand-held metal detectors could help localize metallic objects. ¹² Just as depicted in the radiographs above, the nature and position of a metallic object can be confirmed with radiographs. Negative radiographs do not rule out the presence of foreign objects. Non-radio-opaque objects can be localized using 3-dimensional computed tomography and, in addition, a contrast endoscopy can be valuable.⁸

The management of ingested foreign objects can be by observation, endoscopy and or surgical intervention. The choice of management depends on the anatomical location, size, shape and nature of ingested object and the competence of the endoscopist.¹⁰ There is no validated guideline in management of these patients especially in adults. 11 The management of metallic foreign objects that result in perforation of the stomach with resultant sepsis are extremely rare and are associated with increased 11. morbidity and mortality. 12 Our patient who presented with peritonitis had laparotomy with removal of the 12. retained object, repair of gastric perforation and irrigation of the peritoneal cavity with warm saline. Post-operatively the patient had remarkable improvement.

CONCLUSION

Swallowed foreign objects are rare in adults with majority being asymptomatic requiring only observation, while few patients are symptomatic and requiring endoscopic or surgical intervention.

Consent

Written informed consent was obtained from the patient for the publication of this case report and the images

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Conflicts of Interest

There is no conflict of interest.

REFERENCES

- Boumarah DN, Binkhamis LS, AlDuhileb M. Foreign body ingestion: Is intervention always a necessity?. Annals of Medicine and Surgery. 2022 Dec 1; 84:104944.
- Wyllie R. Foreign bodies in the gastrointestinal tract. Current opinion in pediatrics. 2006 Oct 1;18(5):563-4.
- Ambe P, Weber SA, Schauer M, Knoefel WT. Swallowed foreign bodies in adults. Deutsches Ärzteblatt International. 2012 Dec 14;109(50).
- Al-Salem AH, Qaisarrudin S, Murugan A, Hammad HA, Talwalker V. Swallowed foreign bodies in children: aspects of management. Annals of Saudi Medicine. 1995 Jul;15(4):419-21.
- 5. Kay M, Wyllie R. Pediatric foreign bodies and their management. Current gastroenterology reports. 2005 May;7(3):212-8.
- Erbil B, Karaca MA, Aslaner MA, İbrahimov Z, Kunt MM, Akpinar E, et al. Emergency admissions due to swallowed foreign bodies in adults. World journal of gastroenterology: WJG. 2013 Oct 10;19(38):6447.
- Alabi BS, Oyinloye OI, Omokanye HK, Aremu SK, Afolabi OA, Dunmade AD, et al. Foreign bodies in the upper aerodigestive tract of Nigerian children. Nigerian Journal of Surgery. 2011;17(2):78-81.
- 8. Dorterler ME, Gunendi T. Foreign body and caustic substance ingestion in childhood. Open Access Emergency Medicine. 2020 Nov 4:341-52.
- 9. Gracia C, Frey CF, Bodai BI. Diagnosis and management of ingested foreign bodies: a ten-year experience. Annals of emergency medicine. 1984 Jan 1;13(1):30-4.
- Eisen GM, Baron TH, Dominitz JA, Faigel DO, Goldstein JL, Johanson JF, et al. Guideline for the management of ingested foreign bodies. Gastrointestinal endoscopy. 2002 Jun 1;55(7):802-6.
- 11. Chen MK, Beierle EA. Gastrointestinal foreign bodies. Pediatric annals. 2001 Dec 1;30(12):736-42.
- Au A, Goldman RD. Management of gastric metallic foreign bodies in children. Canadian family physician. 2021 Jul 1;67(7):503-5.