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Large Bowel Obstruction and Multiple Small and Large Bowel Micro Perforation Caused by the Ingestion of Foreign Body (Case Report)

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ABSTRACT

50 years old Schizophrenic male referred with abdominal pain, nausea and vomiting .patient reported abdominal pain since one year prior to admission. Previous studies, including ultrasound and lab tests did not show anything .plain abdominal radiography showed multiple metallic bars in abdominal cavity. Abdominal laparotomy was done and nine metallic bars removed from stomach and small and large bowel and patient discharged with good condition. Report of this patient emphasizes on importance of simple abdominal radiography in the differential diagnosis of abdominal pain.

Keywords: Large Bowel, Foreign Body

INTRODUCTION

Foreign body ingestion and its complications is one of the issues that we are facing in emergency departments in abundance. Foreign bodies swallowed in two ways, randomly or intentionally. Random type often seen in children less than five years of age (80%) and in cases of intentional include people with mental health problems or in prisoner [1, 2].

foreign body ingestion is common occurrence especially in children, alcoholics ,mentally handicapped and edentulous people wearing dentures. However, majority of the individuals pass this objects without any complications[3]. Most foreign bodies pass readily into the stomach and travel the remainder of the gastrointestinal l tract without difficulty, nevertheless, the experience is traumatic for the patient, the parents, and the physician, who must await the removal or the ultimate passage of the foreign body[4]. The alimentary canal is remarkably resistant to perforation: 80% of ingested objects pass through the gastrointestinal tract without complications [5]. About 20% of ingested foreign bodies fail to pass through the entire gastrointestinal tract [6]. Any foreign body that remains in the tract may cause obstruction, perforation or hemorrhage, and fistula formation. Less than 1% result in perforations from the mouth to the anus and those are mostly caused by sharp objects and erosions [7, 8]. Of this sharp objects, chicken bones and fish bones account for half of the reported perforations. The most common sites of perforation are the ileo cercal junction and sigmoid colon [5].

Case

The patient is a fifty years old schizophrenic male in psychiatric hospital who was complaining of chronic abdominal pain and anorexia since one years prior to admission. He referred to physician several time without definite diagnosis and response to medical treatment.

Abdominal solography was normal two times. Finally referred to emergency room with complain of abdominal pain, nausea and vomiting. Patient admitted with impression of acute abdomen.

In plain abdominal radiograph multiple foreign body ingestion was diagnosed. In emergency laparotomy multiple metal bars removed from stomach, duodenum, jejunum and sigmoid colon with gastrostomy and enterotomy. Small fibrin material was observed on small and large bowel surface in multiple locations due to previous micro perforation without overt perforation or intra peritoneal collection and fluid. Colostomy was done for patient due to sigmoid fibrosis and obstruction.

Patient discharged with complete recovery after one week. Closure colostomy was done for him after two months.

Figure 1. Plain radiographs of the abdomen showed multiple foreign bodies in the stomach, small intestine and colon

DISCUSSION

The majority of foreign bodies that reach the gastrointestinal tract will pass spontaneously .impaction may occur at areas of anatomical narrowing (the cricopharyngeus, the lower esophageal sphincter, the pylorus, the ileocecal valve and the anus) [1,2,9,10,11].

Treatment depends on the patient's age and symptomatology, nature and type of ingested foreign body and the anatomical location especially if impacted. Foreign bodies may be managed conservatively or therapeutically with endoscopic, laparoscopic or open surgical methodologies.

Blunt objects such as coins can impact in the esophagus resulting in partial or complete obstruction. Endoscopic retrieval should be attempted in all instances, as prolonged lodgment can lead to pressure necrosis, perforation or fistula formation [1, 2]. If the blunt object has passed in to the stomach and is less than 2cm in diameter, a conservative outpatient management protocol with weekly radiographs should be adopted .If the blunt object remains in the stomach, it has been recommended to delay endoscopic retrieval for 1-2 months to facilitate any opportunity for spontaneous passage [2, 12, 13, 14].

Urgently endoscopic retrieval of sharp objects, such a razor blades, straightened paperclips and needles that are lodged in the esophagus should be performed[1,2]. If the object progresses into the stomach or duodenum, immediate attempts at endoscopic retrieval should be undertaken, as the risk of perforation at the ileocecal valve is approximately 35%[1,2,11]. If the sharp object has passed beyond the duodenum, the patient should be monitored with daily radiographs and remain under strict observation. Surgical intervention may be required if a sharp object

fails to progress radio logically after 72-hours. Emergency laparotomy is required if the patient develops acute clinical signs [1, 2].

Batteries (disc or button) require urgent endoscopic retrieval if lodged in the esophagus due to the possible risk of chemical burns, electrical discharge and liquefaction necrosis which can lead to subsequent perforation [1, 2]. Once the battery has passed into the stomach, retrieval is only indicated if it remains in the stomach beyond 48 hours, or if it is a larger battery measuring more than 2cm in diameter [2]. Once beyond the duodenojejunal flexure, 85.4% are passed within 72-hours [15]. A followup radiograph twice per week is sufficient.2 Laxatives and anti-acids have no proven benef it in management [16]. 67% of patients that swallowed batteries developed small bowel obstruction requiring a laparotomy with enterotomy [17].

Packages of narcotics should not be removed endoscopically as the risk of rupture and leak of the toxic substance is high. Surgical intervention is reserved for those cases where signs of obstruction or leakage of substance occurs [1, 2].

CONCLUSION

Foreign body ingestion is common problem in children, psychological and in mental retardation patient and in some cases is life-threatening. Clinical suspicion of foreign body and simple and low cost diagnostic procedures such as radiography of the abdomen can give valuable assistance.

REFERENCES

[1] Pavlidis TE, Marakis GN, Triantafyllou A, Psarras K, Kontoulis TM, Sakantamis AK. Management of ingested foreign bodies: how justifiable is a waiting policy? Internet J Surg 2007; 9(1).
[2] Eisen GM, Baron TH, Dominitz JA, Feigel DO, Goldstein JL, Johanson JF et al; American Society for Gastrointestinal Endoscopy. Guideline for the management of ingested foreign bodies. Gastrointest Endosc 2002;55(7):802-6.
[3] Kimbrell FT Jr, Tepas JJ 3d, Mullen JT. Chicken bone perforation of the sigmoid colon: a report of three cases. Am Surg 1975; 41(12): 814-7
[4] Eldridge WW, Jr. Foreign bodies in the gastrointestinal tract. JAMA 1961; 178: 665–7.
[5] Cleator IG, Christie J. An unusual case of swallowed dental plate and perforation of the sigmoid colon. Br J Surg 1973; 60 (2): 163-5
[6] Nandi P, Ong GB. Foreign body in oesophagus: review of 2394 cases. Br J Surg 1978; 65: 5–9.
[7] Perelman H. Tooth pick perforations of the gastrointestinal tract. J Abdom Surg 1965; 51–3
[8] Goh BK, Chow PK, Quah HM, Ong HS, Eu KW, Ooi LL, Wong WK: Perforation of the gastrointestinal tract secondary to ingestion of foreign bodies. World J Surg 2006; 30(3):372-7.
[9] O'Donnell ME, Gibson N, Sharif MA, Spence RA, Lee J. Crohn's disease of the terminal ileum: a cheap diagnosis. Ir J Med Sci Epub 2007 Aug 18.
[10] Abraham B, Alao AO. An unusual foreign body ingestion in a schizophrenic patient: case report. Int J Psychiatry Med 2005;35(3):313-8.
[11] Murshid KR, Khairy GE. Laparoscopic removal of a foreign body from the intestine. J R Coll Surg Edinb 1998;43(2):109-11.
[12] Blaho KE, Merigian KS, Winbery SL, Park LJ, Cockrell M. Foreign body ingestion in the Emergency Department: case reports and review of treatment. J Emerg Med 1998;16(1): 21-6.
[13] Faigel DO, Stotland BR, Kochman ML, Hoops T, Judge T, Kroser J et al. Device choice and experience level in endoscopic foreign object retrieval: an in vivo study. Gastrointest Endosc 1997;45(6):490-2.
[14] Zuloaga J, Olivera J, Candia A, Arias V, De la Fuente A. [Ingestion of foreign bodies in a prison population; surgical treatment] Spanish. Rev Esp Enferm Apar Dig 1987;72:617-21.
[15] Litovitz TL. Battery ingestions: product accessibility and clinical course. Pediatrics 1985;75(3):469-76.
[16] Namasivayam S. Button battery ingestion: a solution to a management dilemma. Pediatr Surg Int 1999;15(5):383-4.
[17] May Bisharat, Mark E O'Donnell, Niall Gibson, Michael Mitchell, Sigi R Refsum et. al. Foreign Body Ingestion in Prisoners – The Belfast Experience. Ulster Med J 2008; 77 (2) 110-114.