

Betel nut ingestion causing acute intestinal obstruction in an Adult – An Unusual Case Report

Dr Ramnath G¹, Dr Ramesh Kumar Korumilli², Dr Muvva Sri Harsha³, Dr Amulya Kanmathareddy⁴, Dr Pavan Kumar S⁵, Dr Ashish P⁶

¹ Professor, Department of General Surgery, SVS medical college, KNR University of health sciences, Telangana

² Professor & HOD, Department of General Surgery, SVS medical college, KNR University of health sciences, Telangana

^{3,4,5,6} Post Graduate, Department of General Surgery, SVS medical college, KNR University of health sciences, Telangana

Corresponding Author; Dr Ramnath G

Abstract: Foreign body ingestion is a common clinical problem in children but is relatively uncommon in adults. Here we present a case of 35 year old female who came with features of acute intestinal obstruction. Patient underwent exploratory laparotomy and the cause for the obstruction has been found to betel nut (Areca Nut). On enquiry during post-operative period, patient gave us history of chewing betel nut and swallowing it accidentally. Accidental ingestion of foreign bodies in adults is uncommon and if the foreign bodies are large enough, most of the times they require surgical intervention.

Keywords: Foreign body, beetle nut, intestinal obstruction

Date of Submission: 13-02-2019

Date of acceptance:28-02-2019

I. Introduction

Foreign body ingestion is a common clinical problem in children but is relatively uncommon in adults¹. It has a wide clinical spectrum of presentation and a variety of diagnostic and therapeutic options. Foreign body ingestion in adults has been reported to be due to accidental swallowing of dentures or simply food bolus impactions². Accidental ingestion of varied objects may be associated with psychiatric problems³. A high index of suspicion is required for diagnosis as a definite history is difficult to elicit especially in patients who are ill-informed. Radiological investigations do help in confirming the intestinal obstruction, however in most of the cases it is not possible to identify the foreign body.

II. Case Report:

A 35 year old female with no relevant surgical, medical and psychiatric history came with complaints pain abdomen since 3 days, obstipation since 3 days and vomiting since 3 days (4 episodes per day). On Examination the abdomen was distended and generalized tenderness is seen all over the abdomen. No mass or growth felt per rectally. Xray abdomen and USG abdomen both suggested features on small bowel obstruction. Other blood investigations were within normal limits. Patient felt no relief on naso-gastric insertion. Tachycardia and low blood pressure persisted despite conservative fluid resuscitation. Hence patient was taken up for exploratory laparotomy. Intra-operatively small bowel was found distended 20 cms from ileo-caecal valve. A 3x3 cm hard mass felt at the transition point. Enterostomy was done and the mass was retrieved and abdomen closed after saline wash. Initially we were not able to identify what the mass was, however on speaking to the patient and their attenders post-operatively, she recollected ingesting beetle nut. Histopathological examination of the specimen confirmed the same.

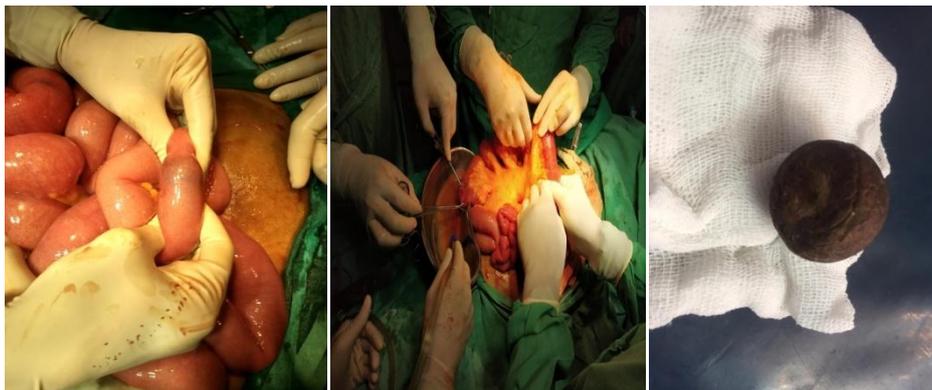


Fig 1 : Intra-operative picture

Fig 2 : Enterotomy being done

Fig 3 : Beetle nut specimen

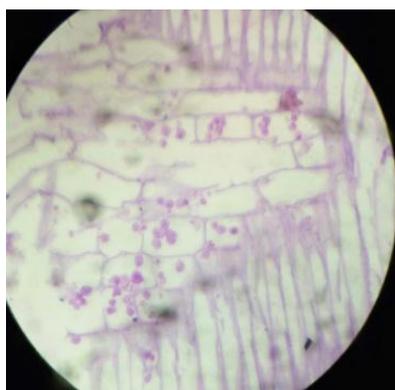


Fig 4 : HPE confirming beetle nut

III. Discussion

Foreign body ingestion is a rare cause of small bowel obstruction⁴. It may be accidental or intentional. The majority of accidental foreign object ingestions occur in the pediatric population with a peak incidence between six months and six years of age. In adults, true accidental foreign object (non-food items) ingestion occurs in patients with psychiatric disorders, mental retardation or alcohol intoxication and old patients due to dentures. Food items like Meat or food bolus^{4,5}, shells, pork, chicken and fish bones⁶ and even dried apricots^{4,7} can get impacted. However sometimes, without any underlying psychiatric condition too, there can be accidental ingestion of foreign substance as it happened in this particular patient.

Presenting symptoms vary depending on site of impaction, type of ingested foreign object and presence of complications. Patients with impaction in small intestine present with symptoms of vomiting, abdominal distension, and constipation.⁷

Radiological investigations have limitations in studying bowel obstruction caused by foreign bodies, especially if they are not radio-opaque.⁷

American Society for Gastrointestinal Endoscopy practice guidelines recommends avoiding contrast radiographic examination prior to removal of foreign objects or food impaction. Asymptomatic patients should be carefully observed till the object passes through alimentary tract as 90% of the ingested FB pass through GI Tract without complications. Endoscopic removal is indicated when the object causes oesophageal obstruction, impaction, or the objects are likely to cause complication viz disc batteries, sharp, pointed objects which are >5 cm long or >2 cm diameter. About 10-20% of ingested foreign body necessitate endoscopic removal.

The decision for surgical intervention depends on the clinical status of the patient after initial resuscitation, hence in case of suspected foreign body ingestion patient has to be kept on strict observation and should be monitored for vitals and any other symptomatic changes. If there is no improvement on conservative management, it is better to go for surgical intervention in form of exploratory laparotomy.

IV. Conclusion

Foreign body ingestion in adults leading to acute intestinal obstruction is uncommon especially when there is no underlying psychiatric causes. Beetle nut chewing is common among rural India. However this is the first time we have encountered a case of intestinal obstruction due to beetle nut ingestion.

References

- [1]. Malick KJ. Endoscopic management of ingested foreign bodies and food impactions. *Gastroenterol Nurs*. 2013;36(5):359-67.
- [2]. Ikenberry SO, Jue TL, Anderson MA, Appalaneni V, Banerjee S, Ben-Menachem T, et al. Management of ingested foreign bodies and food impactions. *Gastrointest Endosc*. 2011;73(6):1085- 91.
- [3]. Blaho KE, Merigian KS, Winbery SL, Park LJ, Cockrell M. Foreign body ingestions in the Emergency Department: case reports and review of treatment. *J Emerg Med*. 1998;16(1):21-6.
- [4]. Pavlidis TE, Marakis GN, Triantafyllou A, Psarras K, Kontoulis TM, Sakantamis AK. Management of ingested foreign bodies. How justifiable is a waiting policy? *Surg Laparosc Endosc Percutan Techniq*. 2008;18(3):286-7
- [5]. Gumus M, Kapan M, Onder A, Tekbas G, Yagmur Y. An unusual cause of small bowel obstruction: dried apricots. *JPMA - J Pak Med Assoc*. 2011;61(11):1130-1.
- [6]. Lam HC, Woo JK, van Hasselt CA. Management of ingested foreign bodies: a retrospective review of 5240 patients. *J Laryngol Otol*. 2001;115(12):954-7.
- [7]. Samdani T, Singhal T, Balakrishnan S, Hussain A, Grandy-Smith S, El-Hasani S. An apricot story: view through a keyhole. *World J Emerg Surg*. 2007;2:20.

Dr Ramnath G" Betel nut ingestion causing Acute intestinal obstruction in an Adult – An Unusual Case Report" *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, vol. 18, no. 2, 2019, pp 17-29.