Case study

Accidental ingestion of spoon presenting as Gastric Outlet Obstruction – an Unusual Case Report

Background

We report a case of a 60 year old male, who presented to our emergency with history of accidental spoon ingestion causing gastric outlet obstruction. Patient had undergone endoscopic extraction which was unsuccessful. He underwent exploratory laparotomy to retrive the spoon and was discharged on 8th postoperative day.

Keywords

Spoon, Gastric Outlet Obstruction, Exploratory Laparotomy.

Case

A 60 year old male presented to our emergency with complaints of pain abdomen associated with large amount of non-bilious foul smelling vomiting since 20 days following accidental ingestion of spoon while cleaning his tongue with it , he also gave history of failed endoscopic extraction of the spoon in some other hospital. There was no significant medical or surgical but patient had psychiatric history. In spite of recurrent vomiting patient was taking food in order to push the spoon distally.

On examination, patient was dehydrated with pulse rate of 110 bpm and blood pressure of 100/70 mmHg. On abdominal examination patient had tender fullness over the epigastrium with tympanic note on percussion and succussion splash on auscultation. ABG showed hypochloraemic, hypokalaemic metabolic alkalosis, rest investigations were unremarkable. A naso-gastric tube was insterted and large amount of foul smelling undigested food particles were aspirated and, after which, a X-ray erect abdomen was done (figure 1) that showed right paravertebral radio-opaque shadow of a spoon. USG whole abdomen showed intraluminal foreign body lodged partly inside distal stomach and proximal duodenum. Based on the history, presentation and investigations a diagnosis of gastric outlet obstruction secondary to accidental spoon ingestion was made and patient was shifted to operation theatre. An emergency exploratory

laparotomy was done and with a juxta-pyloric gastrotomy, a large amount of undigested foul smelling food was removed. the spoon was found to be tightly occluding the pylorus and proximal duodenum with the pylorus and first and second part of duodenum falling in one straight line with food particles cementing the lodgement. The 14.5 cms spoon was maneuvered with due precautions to minimize futher trauma to stomach and duodenum (figure 2). Gastrotomy was closed in two layers after through wash and placement of naso-gastric tube in-situ. A 28 French intra-abdominal drain was placed and abomen was closed in layers. Post operative period was uneventful and the patient was discharged on post-operative day 8 on full diet. The patient was followed for next 3 months which were uneventful.

Fig 1. X-ray erect abdomen showing right paravertebral radio-opaque shadow of spoon.

Figure 2. 14.5 cms spoon after extraction.

Discussion

Most of the cases of foreign body ingestion that present to the emergency are in the paediatric age group, whereas in healthy adults this is rare and the patients are either psychiatric or under the influence of alcohol [1].

The impaction of foreign body is also determined by its dimensions, any foreign body longer than 6 cms and wider than 2 cms are less likely to pass spontaneously[2].

Types of foreign bodies can be Radio-opaque viz. coins, spoon, fish bones, magnets, etc. or Radiolucent viz. food bolous, trichobezoars, phytobezoars, etc..[3,4]. Body packing refers to smuggling of drugs by swollowing it in packets which could obstruct or burst causing toxicity.

Any foriegn body that has been intentionally or accidentally ingested might lodge at few anatomical narrowings of the oesophagus.

S.no.	Site	Distance from incisors (in cms)
1	Pharyngo-oesophageal junction	9
2	Crossing of the arch of aorta	22.5
3	Crossing of the left principal bronchus	27.5
4	Level of the diaphragm	40

Out of total about 80 % to 90% of foreign bodies do not need any intervention and can be managed conservatively, arround 10% to 20% might need **Endoscopic** intervention and less than 1% will need surgery in form of **Exploratory Laparotomy** [5,6,7,8]. **Laparoscopic or Laparoscopic assisted** romoval of the foreign body can be attempted to avoid large laparotomy incision in young patients[6,8].

Diagnosis mainly is by history, which is supported by investigations like CT abdomen (sensitivity of 100% and specificity of 91%) and X-ray and USG whole abdomen, out of which latter is of less diagnostic value [9]. A general plan of management is highlighted figure 3.

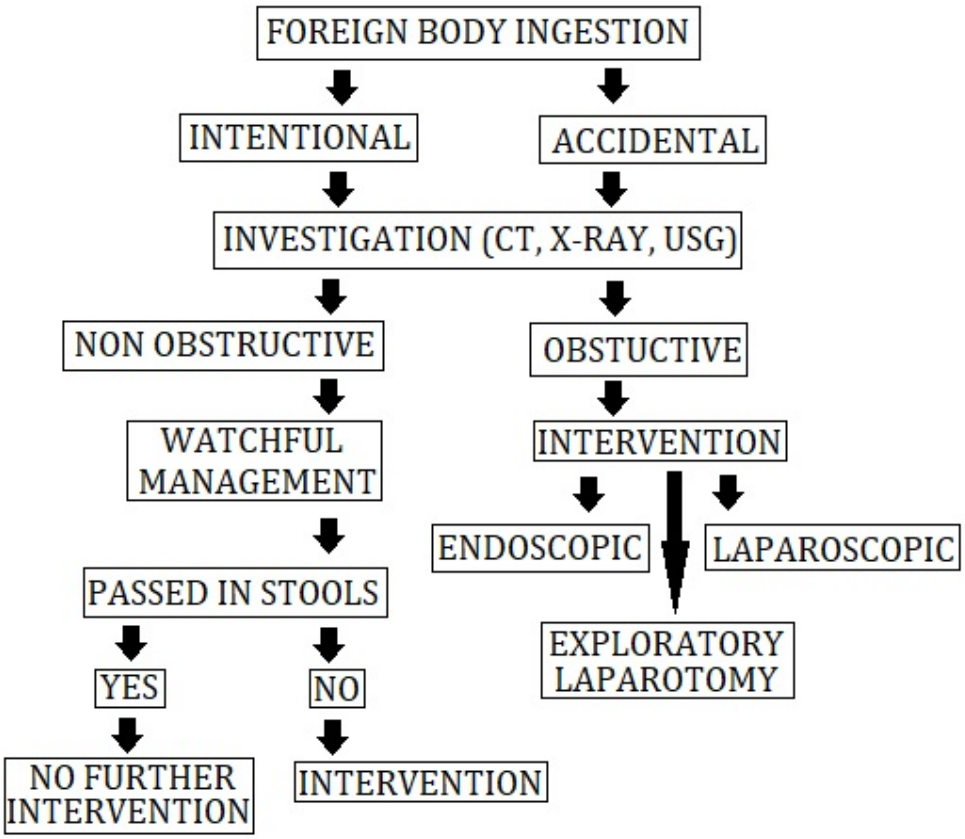

Figure 3. General plan of management .

Complications due foreign body ingestions can be :

1. Obstruction.
2. Haemorrhage.
3. Perforation (especially if the foreign body is sharp), leading to peritonitis or mediastinitis.
4. Pressure necrosis at the site of impaction.

Conclusion

Foreign body ingestion and further obstruction is commonly encountered in emergency department. The main idea is to tailor the treatment accoding to type and size of the foreign body and site of obstruction.

Conflicts of Intrest / Sponsorship/Funding

There were no conflicts of intrest and niether any funding or sponsorship was availed.

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