



A RARE CASE OF METALLOPHAGIA

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KEYWORDS :

CASE REPORT

A 30 years old male patient K/C/O schizophrenia, presented with complaint of generalised abdominal distension, upper abdominal pain and vomiting for 03 days. Xray chest and abdomen showed multiple radio opaque densities s/o foreign body ingestion. Patient was taken for emergency surgery and on exploration, approx. 200 varying sized sharp metallic foreign bodies were removed. Post operative course was uneventful.

Patient presented again after 01 year with similar complaints, and was diagnosed with single foreign body in airway as well as multiple foreign bodies in abdomen. Patient underwent immediate bronchoscopy and 5 cm long sharp metallic pin was removed from right main bronchus. Patient was then taken for emergency exploratory laparotomy and approx. 450 metallic foreign bodies were removed from stomach. In post-operative period patient developed septicaemia and DIC and expired on postoperative day 8.

INVESTIGATION:

Chest and abdominal X ray, intra operative abdominal X ray.

INTRA OP FINDINGS:

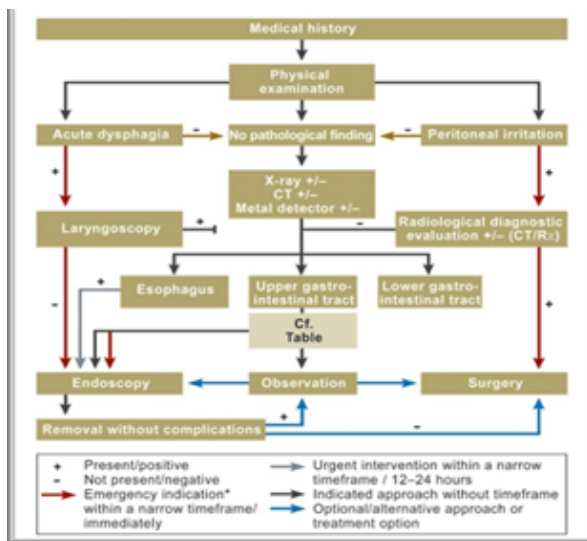
Gastrostomy done by making a 5 cm transverse incision over anterior wall of body of stomach. Approx. 450 metallic objects weighing around 3.5 kg. including nails, pins, screws, blades, coins were extracted with the help of intra operative X Ray.



Entire small and large bowel was normal, stomach wall was grossly cicatrised, there was no perforation in stomach wall. Stomach wall was sutured with silk 2-0 in two layered fashion.

DISCUSSION

Pica is a psychological disorder characterised by an appetite for substances that are largely non-nutritive, such as hair(trichophagia); paper (xylophagia); sharp objects(acuphagia); metal(metallophagia) or soil(geophagia). Foreign body ingestion is a common clinical problem.it is either accidental, intentional or as a result of underlying mental or emotional disorder. Those at risk include children and older people, prisoners, patients with psychiatric illnesses. Most ingested foreign bodies will pass through the GI tract without symptoms and cause only minor mucosal injury. However, 10-20% cases will require some kind of non-operative intervention and 1% may develop complications (bowel obstruction, perforation, severe haemorrhage, abscess formation and septicaemia) and require surgical intervention. Most common foreign body ingested by adults is fish bone.



As long as no occlusion or complication develops, the clinical signs are not dramatic and may even be lacking. Most patients present with the sensation of a foreign body, difficulty in swallowing, chest or abdominal pain or vomiting. The passage through the duodenum depends on the diameter as well as the length of the foreign bodies. Foreign body larger than 6cm and diameter more than 2.5 cm makes the duodenum passage difficult. Patient may point out the possible location of foreign body according to Connelly et al. which does not always correspond with the actual location of the foreign body. Thus, physical examination should not be restricted to the symptomatic region. In some cases, the diagnosis of an ingested foreign body is made days or months after the body was ingested. For diagnosis, radiography of affected region has been recommended as an initial screening.

For non-radio dense foreign bodies, routine X ray examination is mostly not sufficient to exclude ingestion of foreign body. Such foreign bodies can excellently be identified by using CT-scanning as shown by Coulier et al. with sensitivity of 100% and specificity of 91%. The use of USG to diagnose ingested foreign bodies seem uncommon.

ENDOSCOPOIC GUIDELINE TABLE

Surgical intervention is required in less than 15% of cases. Since endoscopic techniques have progressed, surgery takes more of a background seat. The absolute indication of surgery exists only in cases of perforation. Relative indication of surgery after foreign body ingestion exist in the case of complication that cannot be resolved endoscopically or after unsuccessful attempts at endoscopic recovery. Many authors recommend a surgical consultation in patient whose ingested foreign bodies have remained in the same place in the distal duodenum for longer than a week.

Table

Indication for esophagogastroduodenoscopy and recommendations further treatment (1, 3, 5, 9, 13, 15, 17)

Urgent need for endoscopy	Type of foreign body (FB)
Emergency esophagogastroduodenoscopy	Bolus impaction with complete occlusion of the esophagus Sharp/pointed FB Batteries
Esophagogastroduodenoscopy within 12-24 hours	Magnets FB >6 cm in length Other FB in the esophagus
Elective esophagogastroduodenoscopy	FB >2.5 cm diameter Prepyloric FB

CONCLUSION

Ingested foreign bodies are passed naturally in some 85% cases. In 20% cases, endoscopic removal is indicated. Surgical intervention is indicated in <1% cases and chances of perforation is rare in case of chronic ingested foreign bodies. However, keeping in mind the potential grave complications, proper discretion should be used for management of these cases.

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