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FOREIGN BODY IMPACTION AT LOWER END OF OESOPHAGUS.

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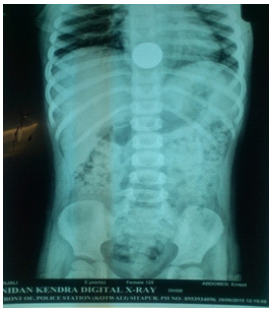
KEYWORDS :

INTRODUCTION.

Infants put almost everything into their mouths, and toddlers eat just about anything. Of all the cases of foreign body ingestion reported each year, 80 percent occur in children [1-4].. The majority of foreign body ingestions occur in children between the ages of six months and three years. [1,5,6] Oesophageal foreign body impaction is an emergent condition that presents with acute dysphagia, chest pain, and foreign body sensation [8]. If left untreated, it can result in local oesophageal injury such as oesophagitis or ulceration, oesophageal obstruction / perforation or rupture (Boerhaave's syndrome), bowel obstruction from downstream migration of previously impacted items.[8,9,10,11,] Young children may be particularly vulnerable to Oesophageal foreign body impaction due to a small oesophagus diameter coupled with the tendency to put a variety of objects directly into their mouth. Fortunately, most foreign bodies that reach the gastrointestinal tract pass spontaneously. Only 10 to 20 percent will require endoscopic removal, and less than 1 percent require surgical intervention [1,5,7]. Although mortality from foreign body ingestion is extremely low, deaths have been reported. [5,8,9] The most common site of foreign body impaction is at the upper end of Oesophagus, as it is the narrowest part of the GI tract (>80% cases) and very rarely we have impaction at the lower end of oesophagus. Here we will be presenting a rare case of Coin impaction at the lower end of oesophagus with diagnosis and management.

CASE PRESENTATION.

A 5 year old female clild named Anjali resident of Maholi, Sitapur, came to our OPD at Mayo Institute of Medical Sciences, Gadia, Barabanki, on 4.7.15 with chief complaints of ingestion a one rupee coin about 25 days back with inability to swallow solids, she was able to swallow liquids but even it was causing a lot of retrosternal pain, she also had mild fever, although the child was physically fit and healthy. She was carrying an X-ray chest and upper abdomen with her which showed impacted coin at the lower end of the oesophagus, which is not a very common site of impaction, a repeat X-ray was done at our hospital on which showed the coin at the same place. Since already about a month had passed so it was decided to admit the patient immediately and do an Oesophagoscopy and remove the foreign body, necessary investigations were done and rigid oesophagoscopy was done after explaining the risks to the patient as the coin was about a month old.



The oesophagoscope was passed upto the lower end of oesophagus where frank pus was encountered, pus was removed using suction (about 5 ml pus was removed) when we saw that there was a lot of odema and granulations present at the lower end of oesophagus, coin was still not visible, the oesophagoscope was kept about 2-3 centimeters away from the pus and granulations to avoid contact and complications. While doing suction of the area around granulations coin was felt at the tip of the suction (still not visible) between the granulations coming from the two ends (upper and lower) of the oesophagus, knowing that touching the granulation could be dangerous (as it can cause perforation) the foreign body holding forceps was passed between the granulations and the coin was felt, the cup was opened and it was held and removed in one go. There was no bleeding and post operative period was uneventful.

In the post-operative period the patient was kept nill orally for 48 hours, and IV fluids and antibiotics were given along with steroids, Feeding tube was also avoided to prevent perforation during placement of the tube, After 48 hours she was given antibiotic sips initially followed by only cold liquid diet for another 48 hours. Patient was doing well after 4 days of foreign body removal and was discharged with the advice to take only semisolids for another week. Patient was kept in follow-up for 2 weeks during which she remained asymptomatic.

DISCUSSION.

Most complications of foreign body ingestion are due to esophageal impaction, usually at 1 of 3 typical locations. The most common site of esophageal impaction is at the thoracic inlet. Defined as the area between the clavicles on chest radiograph, this is the site of anatomical change from the skeletal muscle to the smooth muscle of the esophagus. The cricopharyngeus sling at C6 is also at this level and may "catch" a foreign body. About 70% of blunt foreign bodies that lodge in the esophagus do so at this location. Another 15% become lodged at the mid esophagus, in the region where the aortic arch and carina overlap the esophagus on chest radiograph. The remaining 15% become lodged at the lower esophageal sphincter (LES) at the gastroesophageal junction.(12) The presence of eosinophilic esophagitis has been recognized as contributing to adult esophageal foreign body impaction and may be its presenting feature; although less common in children, eosinophilic esophagitis has also been associated with pediatric esophageal food impaction.(12)

Study conducted by A. M. Shivakumar,(13) did not show any coin impaction at the lower end of the oesophagus.

Another study conducted by F. Holt Diggle (14) found that 6% incidence of foreign body impaction at the lower end of oesophagus and all were meat balls.

Study conducted by R.J.Donnelly etal(15) suggested that - An object which has been impacted for some time causes oesophageal

damage rendering the patient at higher risk at the time of removal.

This is a very rare case of impaction of a foreign body (coin) at the lower end of the oesophagus, no significant literature has been found showing impaction at the lower end. Normally the impaction occurs at the upper end of the oesophagus, when we consider doing a rigid oesophagoscopy to remove it, and when we see the coin at any place beyond the upper end, the general practice is to wait and watch for the coin to pass in the stool which occurs in majority of the cases, but we must always keep in mind about the possibilities of impaction at the lower end as happened in this case, and admit the patient till the foreign body passes from the stool, adequate time should be given and necessary X rays should be done at regular intervals and if the foreign body do not show signs of passing down the eosophagus, Oesophagoscopy should be done to remove the coin as early as possible, before pus and granulations come to avoid complications of the disease and procedure.

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