Multiple esophageal foreign bodies in an infant: a rare case of serious parental neglect

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Abstract
A case of multiple esophageal foreign bodies, which were retrieved successfully by rigid esophagoscopy in a 1-year old child is being reported. There are few cases of multiple esophageal foreign bodies in children reported in the literature; this case was unique in presentation as there was no history of foreign body ingestion. This case also highlights the serious neglect present in our society towards children of lower socio-economic strata despite this child being the 1st child in the family.

Introduction
Esophageal foreign bodies are a common occurrence in children, psychiatric patients and prisoners. Most of the children of esophageal foreign body (FB) present with a history of FB ingestion noticed by the parents or sometimes the child himself gives a positive history. Rarely, an accidental diagnosis of FB ingestion is made on routine radiology.1 Most of the case series published on foreign body ingestion have described only few cases of multiple FB ingestion.2-3 In children, only a few single case reports of multiple esophageal FB’s ingestion have been published in the literature.4-5

We are presenting a case of only girl child of otherwise mentally healthy parents who was diagnosed with multiple esophageal FBs on routine neck X-ray while evaluating the cause for dysphagia and drooling. The case is also unique in that during those 15 days since when child was symptomatic, parents never noticed the child taking any FB in the mouth thereby highlighting the serious neglect on the part of parents towards their only girl child.

Case Report
A 1-year old child presented in the Ear, Nose and Throat Out-Patient Department with complaints of dysphagia and drooling since last 15 days which progressively increased to absolute dysphagia since last 3 days. Child also used to vomit after every feed since last 3 days. There was no history of fever, respiratory distress, cough or any other systemic symptoms. The parents did not consult any doctor for the presenting complaint during these 15 days. On examination, except drooling there was no other positive finding. X-ray soft tissue neck was ordered as part of routine investigation. To our surprise it revealed a radio-opaque foreign body shadow at the level of cricopharynx (Figure 1). Retrospectively, on interrogation, no positive history of any foreign body ingestion was given by the parents.

On the basis of radiological findings, the patient was kept for rigid esophagoscopy for FB removal under general anesthesia. To our surprise, during the procedure a lot of food debris and secretions were present at the level of 10-12 cm from upper incisor. Under telescopic guidance, after clearing secretions and food debris using suction, we found multiple FB’s at this site (Figure 2). Three pieces of stone, two pieces of plastic bracelet, an aluminum ring, a metallic nut bolt and two cotyledons of pulses were retrieved at the level of upper esophagus. Rest other vegetative FB’s (pieces of pulses) were removed in piecemeal using forceps as they had become fragile (Figure 3). Granulation tissue and mucosal edema was present at the site of FB lodgment. The esophagoscopy was then advanced further to look for any other FB but after 12 cm from upper incisor, it could not be negotiated due to presence of edema. After this, a check esophagoscopy ruled out the presence of another FB. Post-operatively the patient was put on antibiotics and steroids. Postoperative period was uneventful. The patient was discharged the next day when she started accepting semisolid and liquid food easily. After a week barium swallow was done which ruled out stricture. The patient is on follow up since last 8 months, she is now normal and accepting food (solid as well as liquids) well. On retrospective evaluation, no history of any psychiatric illness was found in the parents of the child.

Discussion and Conclusions
FB esophagus is a common occurrence in children most commonly presenting between six months to six year of age.1 The present case was a one year old child. Though multiple foreign bodies in esophagus are a rare clinical entity, most of these cases generally have a unique presentation. Most of the cases of multiple esophageal foreign bodies are psychiatric patients. Homicidal intent may also be present in a few of such cases.4 Every case of multiple foreign bodies should be dealt with caution and in such cases it is prudent to rule out any psychiatric illness or homicide/suicide intent. The history of psychiatry illness in the parents was negative. The cases of multiple esophageal FB may also present due to the parental neglect though this presentation is extremely rare.

Dysphagia with drooling in a child usually signifies a serious organic lesion like retropharyngeal abscess or acute epiglottitis etc.; but negative history in the present case excluded an infective etiology. With a high index of suspicion, an X-ray soft tissue neck lateral and antero-posterior view and chest X-ray postero-anterior view were advised, which revealed a radio-opaque shadow at the level of cricopharynx. This underlines the importance of this radiological investigation in such cases particularly in children. Though radiology suggested a single FB, on esophagoscopy under telescopic guidance, we were able to observe multiple distinct FB’s in the esophagus and these were removed one by one under direct vision.

The present case is unique in that despite being the first child in the family, she was neglected for such a long time. As psychiatric illness was ruled out in the parents of the child, lack of proper care seems to be the only reason for this neglect. As the child belongs to a labor class family with low socio-economic strata, most probable cause for this neglect seems to be due to lack of time on the part of both the parents as both need to go out of house for their livelihood. Therefore, the child got neglected and did not get proper care. The other
A plausible explanation for this case seems to be pica, which is also quiet common at this age.

This case presented many other unique features also. First, multiple FB’s were found in the esophagus which in itself is a rare occurrence. Secondly, surprisingly more than ten foreign bodies were found stuck in the esophagus but the parents have never observed any of these materials taken by the child. Thirdly, although there is no bad intention involved in this case but a serious neglect has been shown by the parents towards such a small child.

A high suspicion of foreign body ingestion should be kept in children with history of dysphagia with drooling. An X-ray soft tissue neck is an inexpensive and easily available investigation in such cases for general practitioners, pediatricians as well as otorhinolaryngologists. We also recommend removal of esophageal FB under telescopic guidance as this makes the procedure more safe, simple and easier. A check esophagoscopy should always be done to look for the presence of other foreign body in cases of FB ingestion.

References

1. Isser DK. Rare and unusual presentation of multiple oesophageal foreign bodies in infant. Indian J Otolaryngol 2005;57:159-61.
2. Nandi P, Ong GB. Foreign body in the esophagus: review of 2394 cases. Br J Surg 1978;65:5-9.
3. Cheng W, Tam PK. Foreign-body ingestion in children: experience with 1265 cases. J Pediatr Surg 1999;34:1472-6.
4. Medatwal A, Gupta PP, Gulati RK. Multiple Foreign Bodies in a Neonate. Indian Pediatr 2008;45:928-30.
5. Whelan-Johnson S, Hall CE. Multiple oesophageal foreign bodies: the importance of two radiological views. J Laryngol Otol 2009;123:121-2.