An unusual foreign body lodged in cricopharynx of one year old child- a rare case report

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Abstract

Foreign body ingestion is common in children, but can be seen among adults also. Most common foreign bodies in children are coins, but marbles, button, batteries, safety pins and bottle tops are also reported. The best method of removing impacted foreign body remain controversial. Rigid endoscopic removal of foreign body is safe and effective, but requires General anaesthesia. The flexible fibreoptic endoscopic removal, which can be done under LA in outpatient department has gained great popularity over the past decade. One year old female child came with history of accidental ingestion of unknown foreign body since one day. child is asymptomatic and taking breast feeding, on clinical examination child is stable. On radiological study, antero-posterior and lateral view for soft tissue neck shows a flat surfaced metallic foreign body in lateral and antero-posterior view showed a hair pin bend foreign body at the level of 4, 5 and 6 cervical vertebrae. Under GA and under high risk, rigid oesophagoscope was planned and proceeded. A uncuffed endotracheal tube inserted with throat pack around it. Negus Rigid Oesophagoscope of paediatric size used. Oesophagoscope is reinserted for re-examination of foreign body impaction and any erosion of mucosa or perforation or any other second foreign body. The procedure went uneventfully and the patient shifted with Ryle's tube in-situ to paediatric ICU and discharged after 2 days.

Keywords: Foreign body, Oesophagoscope, Endotracheal tube, Rigid endoscopy.

Introduction

Foreign body ingestion is common in children, but can be seen among adults also. Foreign body is ingested accidentally but occasionally homicidal or suicidal. Most common foreign bodies in children are coins, but marbles, button, batteries, safety pins and bottle tops are also reported. Foreign bodies which have gone beyond the oesophagus will pass uneventfully through intestinal tract in 70-80% cases. The level at which progress is impeded are pylorus, duodenum, duodenojejunosflexure etc., Radiological localization is mandatory for decision making regarding the removal. Smooth foreign bodies do not pose much threat but may cause airway obstruction due to oedema. Sharp foreign bodies, if not retrieved at the earliest may penetrate oesophageal wall and cause complications and urgent intervention is required for sharp foreign bodies like, chicken bone, safety pin, fish bones. The best method of removing impacted foreign body remain controversial. Rigid endoscopic removal of foreign body is safe and effective, but requires General anaesthesia. The flexible fibreoptic endoscopic removal, which can be done under LA in outpatient department has gained great popularity over the past decade.

Case Report

One year old female child came with history of accidental ingestion of unknown foreign body since one day. child is asymptomatic and taking breast feeding, on clinical examination child is stable, on radiological study, antero-posterior and lateral view for soft tissue neck shows a flat surfaced metallic foreign body in lateral and antero-posterior view (figure 1 and 2) shows
a hair pin bend foreign body at the level of 4, 5 and 6 cervical vertebrae.

On insertion of oesophagoscope a suctioning did at the level of cricopharyngeal area, a smooth metallic substance is seen which was slippery in nature for which different foreign body holding forceps tried. But with adult crocodile holding forceps the slipping foreign body was firmly held and removed along with the oesophagoscope the foreign body is a metallic book holding clip (figure 4 - 7).

Procedure Planned

Under GA and under high risk, rigid oesophagoscopy planned and proceeded. A uncuffed endotracheal tube inserted with throat pack around it. Negus Rigid Oesophagoscope of paediatric size used. With different size and shaped foreign body holding forceps used (figure 3).
Foreign body impaction in upper digestive tract has been a problem for a long time. Foreign body ingestion often requires endoscopic removal, but occasionally, foreign bodies may pass through the entire gut without causing any problems to the patient. Foreign bodies less than 2.5 cm in diameter and/or less than 5 cm in length usually pass through the gut. However, any foreign body that is large or sharp may be impacted. Rarely, foreign bodies which are not large may be impacted in the oesophagus in cases of strictures and smooth muscle spasm.

The common sites of impaction of foreign bodies in the oesophagus are post-cricoid region, level of aortic arch, left main bronchus, and diaphragm. There is one more site of impaction especially in cases of flat objects like coins at the level of T1 i.e. thoracic inlet. Blunt foreign bodies can be removed safely from the oesophagus without creating any problem to the patients. Foreign bodies less than 2.5 cm in diameter and/or less than 5 cm in length usually pass through the gut. However, any foreign body which is large or sharp may be impacted. Rarely, foreign bodies which are not large may be impacted in the oesophagus in cases of strictures and smooth muscle spasm.

Discussion

In infant age group, foreign bodies are accidentally put by their siblings, and there is a possibility of negligence/homicidal attempt for an unwanted female child in low socioeconomic group. Such cases need to be registered as medico-legal cases. The most common foreign bodies in children are blunt. Sharp foreign bodies are frequently associated with serious complications like retropharyngeal abscess due to delay in presentation. Therefore, foreign body removal must be done at the earliest. Rigid endoscopy is an effective and safe procedure for foreign body removal.

Conclusion

Foreign body in the upper digestive tract is one of the commonest emergencies in children due to which urgent intervention is required. This case is rare and unusual because age wise it is uncommon; mean age being 2-6 years and coins being most commonly reported. Non-availability of a clear history, lack of characteristic clinical and radiological features, size too big for that age group, being other factors.

In infant age group, they are accidentally put by their siblings and there is a possibility of negligence/homicidal attempt for an unwanted female child in low socioeconomic group. Such cases need to be registered as medico-legal cases. The most common foreign bodies in children are blunt. Sharp foreign bodies are frequently associated with serious complications like retropharyngeal abscess due to delay in presentation. Therefore, foreign body removal must be done at the earliest. Rigid endoscopy is an effective and safe procedure for foreign body removal.

References