

Neglected Coin in Cricopharynx: A Rare Cause of Death

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Abstract

Foreign body ingestion and its subsequent impaction are a common accident encountered in paediatric age group all over the world. A 2 year old girl was referred to SRTR Medical College Ambajogai with complains of stridor, difficulty in swallowing and fever for 8 days. The mother gave a doubtful history of ingestion of a 50 paise coin 20 days back. A tracheotomy was carried out and the patient started on higher antibiotics. The patient was coming out of anaesthesia well but she suffered with fatal cardiorespiratory arrest 4 hrs after admission. Post mortem examination revealed a foreign body affect the cricopharyngeal level with a lot of granulation and infection around it and bilateral pneumonitis. The cause of death was ascertained as septicaemia and pneumonia secondary to impacted foreign body at cricopharynx.

Keywords: Foreign body ingestion; Tracheotomy; Bilateral pneumonitis.

Introduction

Foreign body ingestion and its subsequent impaction are a common accident encountered in paediatric age group. Over 90% of ingested foreign bodies have uneventfully gone through gastrointestinal tract and affected mostly oesophagus [1]. Furthermore, 80% of foreign bodies in oesophagus are held up at cricopharynx on sites of pathological narrowing [2].

In children, coins are most common foreign bodies [3]. They exhibit acute symptoms like choking, excessive salivation, dysphagia or vomiting [1]. However, there are reports of longstanding asymptomatic metallic coins in oesophagus [4] and trachea [5].

The complications of foreign body on oesophagus arise in proportion to the duration

of impaction [6] and removal attempt of via sharp objects [2]. Still outcome of patients with long duration foreign bodies is good [7].

Due to escaping detection, foreign bodies in the oesophagus for long time duration are reported in literature [8]. However, metallic coins and general cricopharyngeal foreign bodies could easily detect due to their radio opaque nature and symptoms of absolute dysphagia.

The fact, esophageal foreign bodies could not cause immediate life threat and pass down easily. This perception may lead to complacency. Death due to metallic coin impaction at cricopharynx is very rare. At most retained foreign bodies at cricopharynx may cause recurrent pneumonitis. Here, a rare case study of 2 year old child with a neglected foreign body (coin) at cricopharynx leads to cause of death was presented.

Case Report

A 2 year old girl was referred to SRTR Medical College Ambajogai with complains of stridor, difficulty in swallowing and fever for 8 days. The mother gave a doubtful history of ingestion of a 50 paisa coin 20 days back.

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(Received on 5.12.2011, accepted on 20.02.2012)

At the time of admission, patient had moderate stridor and cyanosis. However, her general condition was very poor. Radiological examination was revealed a rounded radiopaque foreign body at cricopharynx. The patient was taken to Operation Theater and endoscopy performed under general anaesthesia. Several complications, like granulations, oedema and pus around the opening of esophageal and laryngeal were diagnosed. However, foreign body still not visualized so endoscopy was abandoned. Further, a tracheotomy was performed for coin visualization and given high antibiotics to patients. The patient was coming out well from anaesthesia but she had a fatal cardio respiratory arrest after 4 hours of admission. Post mortem examination was revealed a foreign body impacted at cricopharyngeal level with a lot of granulation and infection which lead to bilateral pneumonitis. The cause of death was ascertained as septicaemia and pneumonia secondary impacted to foreign body at cricopharynx.

Discussion

Oesophageal foreign bodies specially coins are most common and frequent occurrence [3]. Generally, they do not cause problems and the majority of them being expelled spontaneously when treated in time. However, complications arise due to shape (sharpness) of object [2] and duration of impaction [6].

Prognosis of untreated esophageal foreign bodies appears catastrophic on account of possible complications like ulceration, stricture, tracheoesophageal fistula, mediastinal abscess or penetration into a large blood vessel [9]. However, there are reports of incarcerated foreign bodies in oesophagus being treated successfully. The possible mode of presentation of long standing foreign bodies is chronic respiratory symptoms like stridor, wheezing and recurrent pneumonia [10]. Coin in oesophagus could be considered a safe foreign body even though some of complications like migration outside lumen present [8].

In the present case, parents gave a history of foreign body ingestion which leads to infection in lower respiratory tract. Primary consultant did not think appropriate to carry out at least cursory radiological examination. At last, the child was presented in very bad condition with severe respiratory distress and septicaemia at the SRTR Medical College, Ambajogai, India. In the presence of infection or signs of abscess formation, a foreign body can be removed after giving adequate antibiotics to prevent downward spread of infection [11]. With this intent, procedure was abandoned. However, the child died due to bilateral pneumonitis with addition of respiratory obstruction and septicaemia proven in autopsy.

Conclusion

A case study was presented here due to the rarity and severity of complications. In general, study provides a good outcome for patients with a foreign body in oesophagus. It was observed that chances of natural passage of a foreign body especially coin may induce several complacencies. Thus, in every case, suspected foreign body should be investigated clinically and radiologically to establish its presence. Otherwise, this leads to many unnecessary and unpreventable complications.

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