

CASE REPORT

FOREIGN BODY OESOPHAGUS IN AN INFANT: A RARE CASE

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HOW TO CITE THIS ARTICLE:

Faiz muqtadir, M. Muniraju, Khalid Gufran. "Foreign Body Oesophagus in an Infant: A Rare Case". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 19, March 05; Page: 3371-3374, DOI: 10.14260/jemds/2015/484

ABSTRACT: Foreign body ingestion is a potentially serious problem that is observed mainly in children aged six months to three years. Children who have swallowed foreign bodies are asymptomatic most of the time; hence doctors must maintain a high index of suspicion.

KEYWORDS: foreign body, infant, esophagoscopy, stridor.

INTRODUCTION: Ingestion of foreign body in pediatric population is a common but serious incident. Curiosity and preference to oral exploration are the two key factors in its prevalence.

Children of the age 5 months - 8 years are the highest risk for foreign body ingestion.⁽¹⁾ In neonates such an occurrence is rare⁽²⁻⁴⁾ and may pose a difficult management problem for the surgeons. The successful location and extraction of this foreign body demands substantial patience, skills and multidisciplinary team approach. This paper primarily focuses on the management problems encountered and various options available; in particular use of pediatric bronchoscope with optical forceps for retrieving ingested foreign bodies in neonates.

CASE REPORT: A 9 month old male baby was admitted, with history of accidental ingestion of a piece of jewelry, followed by irritability and refusal to feed. (Figure no. 1).



Fig. 1

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FIGURE 2: Plain x-ray revealed an impacted ear ring in the upper part of esophagus (Figure 2).

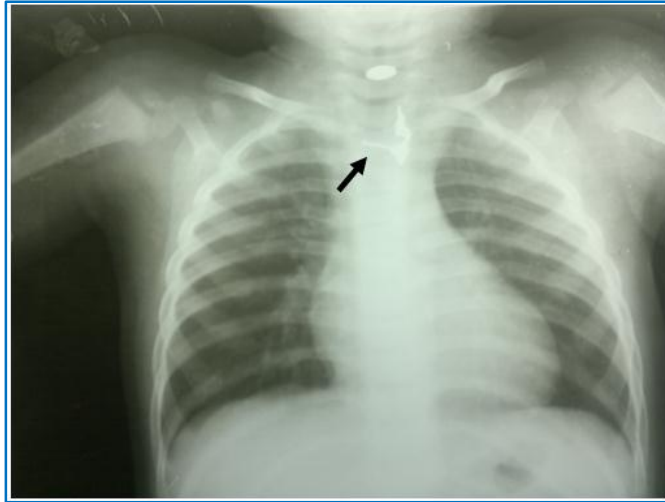


Fig. 2

The foreign body was removed successfully under general anesthesia by using pediatric bronchoscopic sheath (3.5' 26 cm, Storz) with fiberoptic rigid grasping forceps (35 cm, Storz). (Figure no. 3).

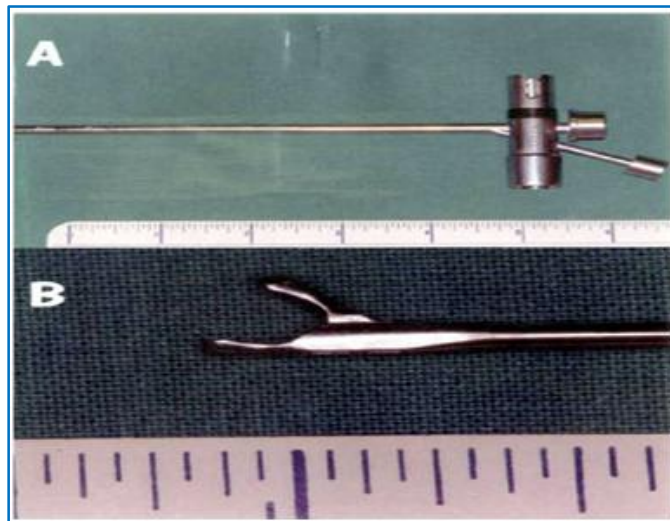


Fig. 3

One of the most serious causes of morbidity and mortality in children below 5 years of age are swallowed and inhaled foreign bodies; children of age 5 month – 8 years are at the highest risk of foreign body ingestion.⁽¹⁾ However, the incidence of esophageal foreign body in neonate is rare.⁽²⁻⁴⁾ Most common esophageal foreign body in neonates is a swallowed endotracheal tube,^(5,6) however, there are other examples mentioned in the literature including stone,⁽⁷⁾ bean,⁽⁸⁾ button⁽⁹⁾ and even a thumb tack.⁽¹⁰⁾ Most of these cases were more than two weeks old. One of our patients had an endotracheal tube and another had a finger ring impacted in their esophagi, both were less than 72 hours old.

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If the incident has not been witnessed and the ingested object is radiolucent, the diagnosis of foreign body ingestion can be very tricky in neonates. Because respiratory distress is the most common manifestation of a foreign body in esophagus in younger children, it may lead to a misdiagnosis of some respiratory disorder.^(9,11) Beside typical symptoms of choking, gagging, dysphagia or drooling, esophageal foreign body in neonates has been associated with hematemesis and malena.⁽⁷⁾ A simple x-ray followed by a contrast study (If needed) can help in establishing the diagnosis. The combined sensitivity and specificity of x-ray and contrast study is 99% and 80% respectively.⁽¹²⁾ Fortunately in our cases the diagnosis was not much of a problem as one had a radio-opaque foreign body (Finger ring) evident on x-ray with a typical presentation. The other baby had an evident event of ingesting a foreign body (Endotracheal tube).

Among children below 3 years of age the impaction of foreign body is common;⁽²⁾ necessitating prompt removal. Frequent lodging sites are the constrictions at the levels of cricopharyngeus muscle, aorta, left main bronchus and lower esophageal sphincter. For removing a foreign body various methods have been described, like Foley's catheter, rigid endoscopy and fiber optic endoscopy.^(13,14) While removal under direct vision is the method of choice, conventional pediatric esophagoscopes of small size are difficult to work with, because of limited "straw" vision.

This visual field is further diminished by the passage of manipulating instruments through the lumen. As a result, grasping takes place in a semi-blind manner. We found that this problem was overcome to a great extent by using an optical forceps within a small pediatric bronchoscopic channel. Its application combines the advantage of excellent visualization and a larger forceps, which can be applied with more precision. Swallowed or inhaled foreign bodies are among the most serious and common causes of morbidity and mortality in pre-school children. However, such occurrence is very rare in infants and newborns. With the introduction of the optical forceps in pediatric bronchoscope, it allows foreign body manipulation with excellent positional control of the tip in smaller diameter of neonatal esophagus. In our experience, we found it to be more convenient and efficient as compared to the conventional esophagoscope.

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FINANCIAL OR OTHER

COMPETING INTERESTS: None

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Date of Submission: 05/02/2015.
Date of Peer Review: 06/02/2015.
Date of Acceptance: 23/02/2015.
Date of Publishing: 05/03/2015.