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An Unusual Foreign Body Aspiration in a Child: A Case Report

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ABSTRACT

Foreign body aspiration is an important and preventable cause of mortality and morbidity in children. FBA can result in a spectrum of presentations ranging from incidental to acutely life threatening. In the literature, numerous unique foreign bodies in the tracheobronchial tree have been reported. Here, we present case of a 2 yrs old child who presented to us with respiratory distress. Based on history and examination diagnosis of a foreign body aspiration was made and an emergency diagnostic rigid bronchoscopy was done retrieving the bulb from left main bronchus.

Key words: Foreign body aspiration, respiratory distress.

INTRODUCTION

Foreign body aspiration is an important and preventable cause of mortality and morbidity in children. Aspiration remains a common problem among young children and is commonly divided into organic and inorganic FB aspiration. Organic material such as nuts and seeds are the most commonly aspirated while the inorganic material include a wide range of objects such as plastic pieces, toy parts, beads, coins, pins etc. [(1,2)] However, the nature of aspirated FB is influenced by many factors, such as age, sex, nutritional habit, geographical area and socioeconomic status. [3]

Tracheobronchial aspiration is a worldwide problem which often results in life-threatening complications. It occurs primarily in children below 3 years (approximately 75%) due to the lack of adequate dentition and immaturity of swallowing. [3] On the other hand, infants and toddlers use their mouths to explore their surroundings.

Foreign body aspiration most commonly presents with respiratory symptoms such as wheeze and cough after a choking episode. [4] A careful history and clinical examination can identify those children who need additional investigation, including bronchoscopy. [5] However, if it causes complete airway occlusion it may lead to asphyxia and unfortunately becomes a cause of death. Here, we present a case of unusual foreign body aspiration (bulb) in a child.

CASE REPORT

A 2 yr -old boy was brought to our causality with sudden onset of respiratory distress. He had no history of preceding illness. According to the information of his mother, child was playing with toys when he developed episodes of choking, gagging and cyanotic spells. Immediately they took child to a local paediatrician who referred him to us suspecting that child might have aspirated something.

On examination child was restless, systemic examination showed heart rate of 150/min respiratory rate of 40 /min, with 60 percent SpO2 at room air. On inspection there was subcostal or suprasternal retractions. On auscultation, there was reduced air entry in left lung. X-ray chest (AP view) shows hyperinflation and hyper-translucency in left lung field (obstructive emphysema) (Fig. 1). Due to high suspicion that he might have aspirated something from his toys, we planned for the diagnostic rigid bronchoscopy with high risk consent.

Surprisingly, we got a small bulb in his left bronchus which was removed with endoscopic forceps . (Fig 2,3)
Child improved after bronchoscopy and discharged after 2 days.

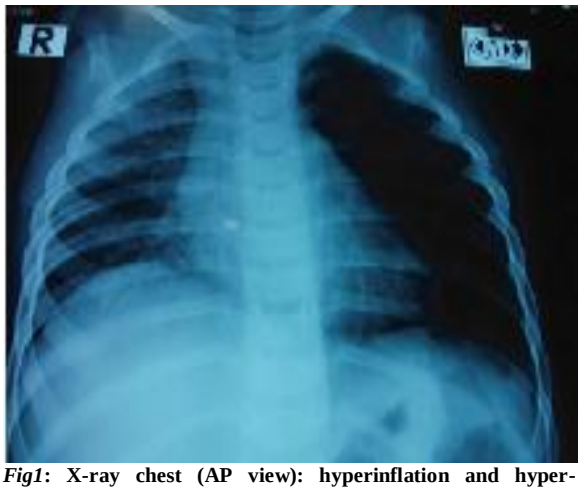

***Fig1*: X-ray chest (AP view): hyperinflation and hyper-translucency in left lung field (obstructive emphysema).**

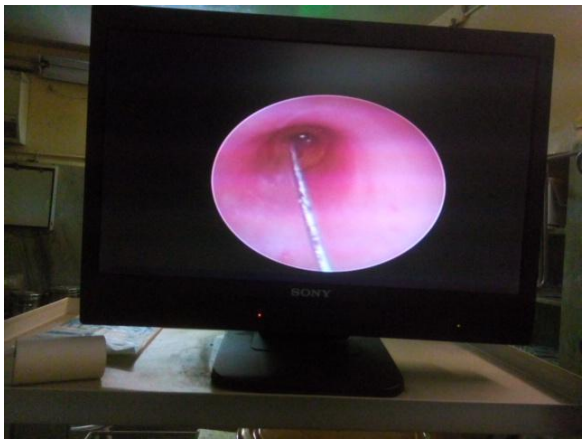

Fig 2 : Foreign body seen in left main bronchus during rigid bronchoscopy.

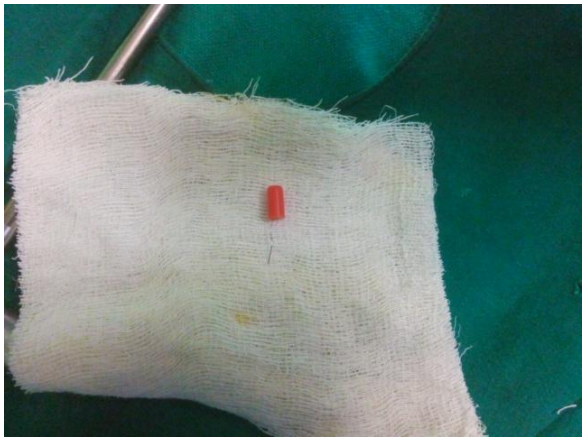

Fig 3 : Foreign body bulb retrieved from the left main bronchus .

DISCUSSION

Foreign body aspiration can be misdiagnosed as asthma, upper respiratory tract infection, pneumonia, or croup. [4] Delay in diagnosis is associated with increased morbidity. [6]

Chest X-ray is the first diagnostic modality in patients with suspected FBA. It may identify either radio- opaque FB or sequels of impacted radiolucent ones, e.g. hyperinflation, pneumonia, or atelectasis. Normal chest radiographs can be found in some cases of FBA.

In 1897 Gustav Killer removed a foreign body from lower respiratory tract with a rigid bronchoscope. During 1st past of 20th century Chevalier Jackson perfected endoscopic technique. [7] Patient with the suspicion of FBA should undergo bronchoscopy for the definitive diagnosis and extraction of FB if it presents. [8]

It is usually believed that FBs are lodged preferentially in the right bronchial tree because of its more vertical disposition. [9,10] But some recent authors have suggested that the left bronchia may be the one primarily affected by FBs. [11] In our case also it was in the left bronchus.

Most inhaled foreign bodies in the pediatric age group are food items, with peanuts being the most common. [12] In our case, it was a bulb which child has aspirated while playing, most likely it may be a part of a small wheeler toys. Parents should remain attentive and carefully watch their child activities to avoid such instances.

CONCLUSION

Foreign body aspiration is an important and preventable cause of mortality and morbidity in children. Immediate intervention is needed by the specialist doctors to manage such cases.

Conflict Of Interest
None declared.

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