

## Bronchial Foreign Body in an Infant: Misleading Presentation and Differential Diagnosis with Bronchiolitis – A Case Report

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### Abstract

### Case Report

Foreign body aspiration (FBA) in infants is a frequent emergency, though sometimes challenging to diagnose. We report the case of an 18-month-old infant initially managed for viral bronchiolitis, in whom a diagnosis of FBA was made belatedly. This case emphasizes the importance of systematically considering FBA in any atypical or persistent respiratory distress in children.

**Keywords:** foreign body, aspiration, bronchiolitis, normal chest X-ray, bronchoscopy.

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## INTRODUCTION

Foreign body aspiration is a common cause of respiratory distress in infants and young children. Diagnosis can be difficult, particularly in the absence of witnessed choking or when the clinical presentation mimics lower respiratory tract infections [1]. We present a case of FBA in an 18-month-old infant initially treated for viral bronchiolitis.

## CLINICAL OBSERVATION

Patient: 18-month-old male infant, with no significant past medical history. Presenting complaint:

Respiratory distress for 3 days, associated with dry cough and moderate fever.

Initial clinical findings: Temperature: 38.6°C, respiratory rate: 52 breaths/min, moderate intercostal retractions, bilateral wheezing on auscultation, oxygen saturation: 91% on room air, the clinical picture was initially interpreted as viral bronchiolitis. Supportive treatment was initiated, including nasal saline irrigation, oxygen therapy, and hydration.

A chest X-ray performed on admission was strictly normal, showing no consolidation or hyperlucency (Figure 1).

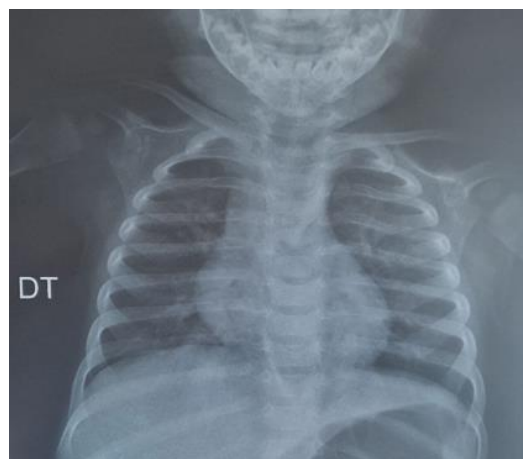


Figure 1: Normal chest X-ray of the patient

After 48 hours of hospitalization without clinical improvement, auscultation revealed asymmetry with decreased breath sounds on the right side. In light of this evolution, bronchoscopy was performed.

A plastic foreign body was found obstructing the right main bronchus. It was removed under general anesthesia without complications (Figure 2).



**Figure 2: Extracted plastic foreign body**

The infant was transferred to the pediatric ward after recovery from bronchoscopy.

## DISCUSSION

Foreign body aspiration in children is a potentially life-threatening emergency. Reported cases in the literature show that this condition is often misdiagnosed as more common respiratory illnesses such as bronchiolitis, asthma, or pneumonia [1]. This diagnostic confusion can delay appropriate management and increase the risk of serious complications, including death [2,3].

Most children present with persistent cough, dyspnea, wheezing, or signs of respiratory distress [4]. In many cases, an initial misdiagnosis of a benign or chronic respiratory condition leads to a delay in performing bronchoscopy. Commonly aspirated foreign bodies are food items (peanuts, sunflower seeds, date pits), though unusual objects like balloons or medical device fragments have also been reported [5].

Diagnosis relies primarily on chest imaging (X-ray, CT scan) and bronchoscopy. Notably, chest X-rays may appear normal in 10–30% of cases. Thoracic CT, especially with virtual bronchoscopy reconstruction, is useful when clinical suspicion remains high despite inconclusive imaging [1,3].

Bronchoscopy remains the gold standard for both diagnosis and removal of the foreign body. It

usually results in rapid clinical improvement. However, delayed diagnosis can lead to pulmonary sequelae such as necrotizing pneumonia or bronchiectasis [6, 7,8]. The persistence or worsening of respiratory symptoms despite well-conducted treatment should raise suspicion for FBA and prompt further investigation, particularly endoscopic evaluation [9,10].

## CONCLUSION

Any atypical or prolonged respiratory distress in an infant, even with a normal chest X-ray, should prompt consideration of foreign body aspiration. Early diagnosis is crucial to prevent potentially severe complications.

## REFERENCES

1. Dias E. An unusual case of foreign body aspiration in an infant. *Case Rep Pediatr.* 2012;2012:1–3.
2. Bourrous M, Lahmini W, Nouri H, et al. Subcutaneous emphysema and pneumomediastinum in child with asthma revealing occult foreign body aspiration: a case report. *J Med Case Reports.* 2019;13:157. <https://doi.org/10.1186/s13256-019-2076-x>
3. Chavoshzadeh Z, Khoshnevisan F, Afshin M, Gharagozlou M. Laryngeal foreign body aspiration misdiagnosed as asthma: two case reports and a review. *Iran J Allergy Asthma Immunol.* 2001;1(2):95–7.
4. Chaudhary N, Shrestha S, Kurmi OP. A child with a foreign body in bronchus misdiagnosed as asthma. *J*

- Family Med Prim Care. 2020;8(12):2409–2413. doi:10.1002/ccr3.3153
5. Tao X, Li S, et al. A missed foreign body aspiration masquerading as congenital pulmonary airway malformation in a nine-year-old boy: a case report and literature review. *Respir Med Case Rep*. 2023;46:101955. doi:10.1016/j.rmcr.2023.101955
  6. Gopal K, Nguyen S, Vu T, et al. A sunflower seed foreign body aspiration misdiagnosed as pneumonia in a child after Tetralogy of Fallot operation: a case report. *Clin Case Rep*. 2023;11(2):e6914.
  7. Frontiers A, et al. An unusual presentation of necrotizing pneumonia caused by foreign body retention in a 20-month-old child: a case report and literature review. *Front Pediatr*. 2023;11:1203103.
  8. Bukhari SMR, Mehdi H, Nadeem MA. Aspiration of an unusual Foreign Body: A case report. *Professional Med J*. 2024;31(12):1775–1778.
  9. Gaur BK, Nazim N, Ahuja S, Fatma A. Tracheal foreign body misdiagnosed as acute bronchial asthma in a toddler child: a case report. *Indian J Health Sci Biomed Res*. 2023;16(3):418–420.
  10. Alruwaili A, Payson A, Tirado Y. 800 gram infant with a bronchial foreign body. *Clin Case Rep*. 2021;9(3):1469–1471.