

Case Report

Light emitting diode bulb aspiration in children: a rare entity

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ABSTRACT

Foreign body aspiration is a life threatening emergency in children. Different types of foreign bodies are aspirated and reported in literature but light emitting diode (LED) bulb is an unusual cause of foreign body aspiration. Rigid bronchoscopy is gold standard for treatment of foreign body aspiration. We wish to present a case of 9 years old male child with LED bulb aspiration which was retrieved with rigid bronchoscopy.

Keyword: Aspiration, Foreign body, LED bulb, Rigid bronchoscopy

INTRODUCTION

Foreign body aspiration in children is a life threatening emergency. Most commonly occurred in children from 6 months to 6 years of age.^{1,2} Most commonly aspirated foreign bodies are peanut, corn, beetle nut, seeds, metallic and plastic toy.^{3,4} Approx 6 cases of LED bulb aspiration have been reported in literature till date.⁵⁻⁸ Rigid bronchoscopy is gold standard for treatment of foreign body aspiration.⁹⁻¹¹ We report case of LED bulb aspiration in a 9 years male child which was managed by rigid bronchoscopy.

CASE REPORT

A 9 years male child presented to our outpatient department with complaints of cough and hemoptysis for 10 days. He had history of foreign body aspiration while he was playing with toys. There was no history of choking, respiratory distress, stridor or cyanosis. On examination, the patient was well built and oxygen saturation was 96% on room air. Chest examination revealed decrease air entry on right hemi-thorax with vesicular breath sounds. Chest X-ray showed a radio opaque metallic wire-like shadow in the right main bronchus (Figure 1 A). On the basis of X-ray initial diagnosis of foreign body aspiration was made. We

admitted the patient and prepared for emergency rigid bronchoscopy. On bronchoscopy, a LED bulb was retrieved from the right main bronchus with the help of alligator forceps (Figure 1 B). Post operative chest X-ray showed good lung expansion with no residual foreign body (Figure 2). Post operative period was uneventful and discharged on postoperative day 3. We kept patient on regular follow-up and patient was asymptomatic at 4 months follow-up.

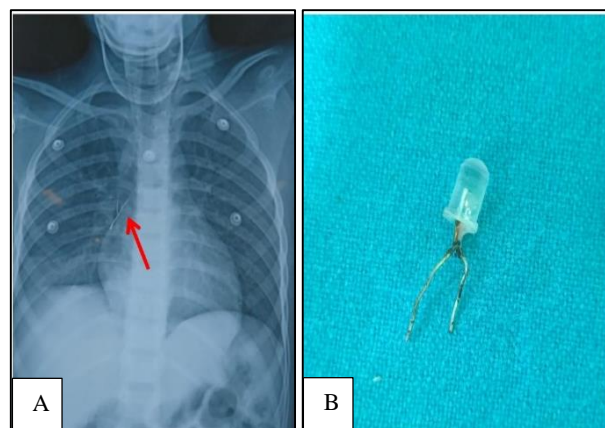


Figure 1 (A and B): Chest X-ray of foreign body in right main bronchus (Red arrow). retrieved LED bulb.



Figure 2: Post operative chest X-ray.

DISCUSSION

Foreign body aspiration is a common life threatening problem in children.^{1,2} Child presents with a wide variety of symptoms like cough, dyspnoea and hemoptysis. Most of patients succumb to death before reaching to health care centre where bronchoscopy facilities available. Detail clinical history and radiological investigations are paramount for the diagnosis. But accurate diagnosis of foreign body aspiration is around 60% on clinical examination.¹² A strong index of foreign body aspiration is suspected with history of sudden respiratory distress, Chocking and cyanosis in a healthy child. In a case of suspected foreign body aspiration, bronchoscopy should be done without any delay. This is our first case of LED bulb aspiration into the right main bronchus which was managed by rigid bronchoscopy. LED bulbs are used in different toys for lightening purpose in recent year. Child attracts and plays with such types of toys, which accounts for the recent increase in reports of its aspiration.

CONCLUSION

In conclusion, parent's supervision is important while child play with such types of toys to prevent devastating complications of foreign body aspiration. A high index of suspicion should be kept in mind for foreign body aspiration if history suggestive of foreign body ingestion even with clinical or radiological evaluation is normal.

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