

Foreign Body Aspiration in a Child Presented with Cardio-Pulmonary Arrest

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Abstract

Foreign body inhalation in children is a serious condition which may leads to acute respiratory distress, lung injury or death. The diagnosis of foreign body aspiration requires a high index of suspicion because the diagnosis is often not obvious. This article presents a case of 3 year old girl presented to emergency with cardio-pulmonary arrest due to foreign body (Balloon) aspiration and revived after timely intervention.

Keywords: Balloon; Cyanosis; Foreign Body Aspiration; Cardio-Pulmonary Resuscitation (CPR).

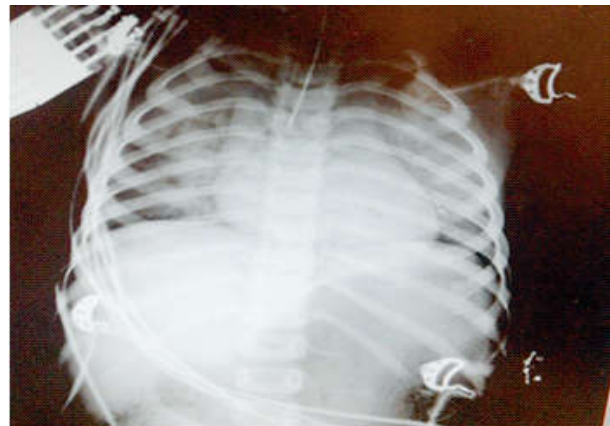
Case Report

3 year old female child , previously healthy brought by her father to Max emergency in a respiratory distress and gasping state with oro-nasal bleed mixed with vomitus since half an hour before arrival in ED. As per her father, she was playing with some other children at home and suspected to swallowed an object unknown to them . Initially she was brought to some local hospital and they tried to put a Ryles tube and failed. Child was referred to Max, SHBG for further management. At presentation, Child was unconscious and cyanosed having Pulse-30/min , BP -120/70 mm hg, SPO₂ -83% in RA, RBS-145 mg/dl, afebril. Cardiac monitor was showing sinus rhythm. Chest examination showed B/L crepts and decreased air entry. Other systemic examination did not reveal any abnormality, no external signs of trauma. In view of poor GCS immediately CPR was started as per ACLS protocol and oro-nasal suctioning was done. On examination of oral cavity no foreign body could be identified. During resuscitative measures suddenly child was coughed out a balloon, which revealed the source of the aspirated foreign body. Child was revived after two cycles of CPR and intubated in emergency. Post resuscitation vitals were Pulse-100/min BP-120/80 mm Hg, SPO₂ -100% (on AMBU) with high flow O₂. Child was sedated with midazolam and fentanyl, steroids and antibiotics were given. Post-

intubation CXR showed no other evidence of foreign body and ABG was WNL. Child was shifted to PICU for further management and care.



Aspirated Balloon



Post-intubation CXR

Discussion

In childhood inhalation of foreign body is a serious condition and may result in acute respiratory distress, lung injury or death. The diagnosis of foreign body aspiration requires a high index of suspicion because the diagnosis is often not obvious. Children, especially those aged 1-3 years, are at higher risk for foreign body aspiration because of their tendency to put everything in their mouths. Children of toddlers age group sucking or inflating balloons are under the risk of suffocation [1,2]. Objects or fragments may be propelled posteriorly, triggering a reflex inhalation. Chest radiograph findings are frequently normal in non-opaque airway foreign bodies leading difficulty in diagnosis [3]. Treating a balloon aspiration can be very difficult as the usual treatment for choking, the Heimlich maneuver, may be ineffective. In an attempt to remove the foreign body by parents themselves

with the finger may prove dangerous as it only push the balloon down farther and lead to more problems. Bronchoscopic removal is the recommended treatment as it is safe and effective [3].

References

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