

Rare Presentations of inhaled Foreign Bodies

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This paper discusses the rare presentations of foreign body inhalation. Sudden appearance of respiratory symptoms and persistence of respiratory problem inspite of adequate medical treatment should be a strong suspicion for foreign body inhalation. Little children are the usual victims but grown up individuals can also have this problem

Key words: Foreign body, inhalation

Accidental inhalation of foreign bodies in the lower respiratory passages is a well-known clinical problem. It constitutes a significant proportion of respiratory emergencies received on ENT floors. Facilities to manage these patients are available only in tertiary care hospitals of this country. Mayo Hospital being the oldest and the largest teaching hospital of the country receives large number of such cases every year. During last five years we received about three hundred patients with this problem. Majority of the patients presented with typical features but few patients presented with real diagnostic challenge and very atypical features. This paper is discussing these unusual cases.

Case 1

A nine years old girl was eating mutton. She had a severe bout of cough while eating. This bout persisted for few minutes and then resolved. Afterwards there was no cough, no respiratory difficulty or wheezing. The only problem which she had was mild hoarseness of voice. A local doctor and an ENT specialist were consulted and both assured that nothing was wrong. Hoarseness was persisting even on tenth day and there was absolutely no other problem. Plain radiograph, of neck region showed a triangular, opaque foreign body in the region of subglottis and upper trachea. Direct laryngoscopy showed a bone firmly impacted into mucosa because of sharp margins. It was not possible to remove it via larynx, so tracheotomy was done and bone removed through tracheotomy.

Case 2

A twenty two months old child was received in the Department of Paediatric Medicine with respiratory symptoms, persisting for last fourteen months. He had productive cough with fever and poor weight gain. Child belonged to a small city and was the only son of the family. Parents consulted local practitioners, child specialist, hakims, homeopaths and peers. He remained admitted in the Paediatric Ward of a teaching hospital. He received treatment for every inflammatory disease of chest including tuberculosis but there was no improvement. Chest x-rays was showing left sided lung collapse. He underwent diagnostic bronchoscopy. A foreign body was found tightly fitting into the left main bronchus which was

removed. Later on lung gradually expanded and symptoms disappeared.

Case 3

A ten years old male child was playing with a small sized plastic whistle in a village when it was suddenly sucked inwards producing severe bout of cough and choking. This situation persisted for a short while and then breathing resumed but cough, discomfort in the throat and mild respiratory difficulty persisted. An interesting feature was that whistle was producing loud sound during forceful respiration. After consulting local doctors, patient reached in nearby teaching hospital who referred the patient to Mayo Hospital. It took six hours to reach Mayo Hospital and he was struggling badly for breathing when received. He was choked very rapidly. Urgent laryngoscopy was done without any anesthesia and an elongated plastic whistle was removed from larynx which saved his life. His respiratory difficulty was because thick secretions blocked the lumen of whistle which was patent in the beginning.

Case 4

A thirty five years old male woke up one night with a severe bout of cough and choking. He was not suffering from any respiratory disease prior to that. He was using a loose denture for upper three incisor teeth. That night, he did not remove it before sleep and now with severe respiratory problem, this denture was missing. Patient consulted village quacks first and then dispensers, doctors, hakims, peers and various specialists. Patient told very clearly his story stressing the loss of denture but nobody believed that it can be inhaled. His cough, expectoration, haemoptysis and exertional dyspnoea did not improve with all sorts of treatment. His chest x-ray was showing chronic inflammatory changes in left lung. He received full antituberculosis treatment but all in vain. He was diagnosed when a radiologist picked the dim shadow of metallic wires of denture in the region of cardiac shadow. So after 18 months of trouble he underwent bronchoscopy and a denture was removed from his left main bronchus.

Case 5

A fifteen years old male got chest x-ray on the advice of a doctor for some non-respiratory problem. It showed a

metallic small sized shadow in right main bronchus. Boy did not recall an inhalational mishap in the past and was not suffering from any chest problem. Bronchoscopy was done and a metallic pallet covered with granulation tissue was removed from right main bronchus.

Discussion

Diagnosis of foreign body inhalation is usually easy, if a proper interview is taken then majority of the patients will give positive history of inhalation. Percentage is variable but figures like 72%¹ and 98%² are given in literature. In one very interesting series history of foreign body inhalation was positive in 100%³ cases but this study was about one particular foreign body only having so many other interesting features as well. Development of respiratory symptoms suddenly in susceptible age group (1-3 years)⁴ is another strong suspicion. Cough, wheeze and respiratory distress is considered to be a classical triad of symptoms after foreign body inhalation⁵. Persistence of respiratory symptoms inspite of adequate medical treatment is another strong point which favours inhalation

of foreign material especially in children. These are all rare presentations of inhalational accidents but must be in the minds of clinician for proper diagnosis. Loose dentures are usually ingested but their aspiration is also possible. Toys like small sized whistles less than the diameter of larynx or trachea are very dangerous with inhalational point of view and should not be given to children.

References

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