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AN UNUSUAL LARYNGEAL FOREIGN BODY IN AN ADULT



ABSTRACT

Foreign body in the aerodigestive tract is an emergency condition that contribute significantly to high morbidity and mortality all over the world. The spectrum of presentation however varies widely from sudden death due to complete respiratory obstruction to accidental finding during routine investigation. Laryngeal foreign bodies may present with less severe symptoms as compared with lower respiratory tract foreign bodies, resulting in misdiagnosis, confusion and delayed diagnosis. Here we present a case report of a 58 years old male who presented with complaint of episodes of difficulty in breathing on exertion since 10 days, with no history suggestive of probable foreign body aspiration. On investigations, the complaints turned out to be due to laryngeal foreign body.

KEYWORDS

INTRODUCTION

Foreign body aspiration is a common problem especially in children and accounts for an important cause of morbidity and mortality. It is a potentially life threatening event and might also cause chronic lung injury if not urgently managed. Foreign body aspiration commonly occurs in children between 1 and 3 years of age and consists mostly peanuts, seeds and other food particles and less frequently of plastic and metal particles. Impacted foreign body of the larynx in the middleaged man is a rare occurrence. Occupational and habitual surroundings make them prone to foreign body aspiration and impaction in the larynx. The diagnosis and treatment of the problem requires high degree of suspicion of foreign body aspiration.^[1,2] Sudden onset of coughing and choking are the most common presenting symptoms. The presentation of a laryngeal foreign body depends upon the size, shape, site, nature of foreign body, and the degree of obstruction leading to a great variability in symptoms.^[3-5]Here, we report a case of 58 year old man with delayed and unusual presentation of impacted laryngeal foreign body.

CASE REPORT

A 58 year old patient presented to emergency department of our hospital with chief complaint of difficulty in breathing and dysphonia since 5-6 hours. Detailed history revealed that patient was an alcoholic and had complaints of intermittent episodes of difficulty in breathing and swallowing since last 10 days. The complaints aggravated in the last one day and there was associated dysphonia since then. There was no history of foreign body aspiration. The patient gave history of one episode of sudden loss of consciousness on the same day. On examination, there was no stridor, Spo2 was 100% with a raised BP (190/110 mm Hg). Flexible fibre-optic laryngoscopy revealed an indistinguishable foreign body just below the level of vocal cords.

Contrast enhanced CT scan of neck and chest (Fig 1 & 2) revealed slightly hyperdense membrane like V-shaped lesion in subglottic region likely to be foreign body or sloughed mucosal membrane.



Figure 1: CECT scan revealing foreign body in subglottic region



Figure 2: Zoomed out view of a section on CECT

The patient was taken urgently for direct laryngoscopy. Under recurrent laryngeal nerve block, Chevallier jackson direct laryngoscope was inserted and the foreign body was extracted with the help of a coin holding forceps.

The foreign body extracted was found to be a mango pickle seed shell (Fig. 3). Post-operative period was uneventful. The patient was discharged the next day following the procedure.



Figure 3: Mango pickle seed shell

DISCUSSION

Lodgment of foreign bodies in the aero-digestive tract commonly occurs in the infant and children.^[6]Children especially between 1 and 3 years appear to be more vulnerable.^[7] Ninety percent of these foreign bodies are accidental in nature and are due to carelessness and are avoidable.^[8]Lodgment of foreign body has been usually seen to occur in mentally retarded intoxicated, or edentulous adult and to some other persons like fishermen, electrician, and decoration worker who use to hold those materials in between their teeth during their work.^[6] The majority of foreign bodies pass through the glottis into the trachea and

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main bronchus. Sticky, thorny or irregular shaped foreign bodies may get lodged in the larynx.^[9] Supraglottic foreign bodies are usually coughed out or inhaled in the glottic, subglottic, or in the bronchus.^[1] Majority of such patients rush to the hospital with stridor, choking and paroxysmal cough sometimes associated with hoarseness, dyspnoea, and cyanosis

Hazra et al reported a case of a coiled metallic spring in the larynx with the complaint of change of voice only at the time of presentation The rapid fatigue of cough reflex (sometimes in 10-15 min) perhaps due to rapid adaptation of surface sensory receptors to the presence of any alien object and followed by an asymptomatic phase that leads to create a false security.^[11] Ghosh et al reported a case of impacted fish bone in subglottic region of an adult larynx for about 3 months.^[12]Philip et al reported a case of 39 years old male patient with a laryngo-tracheal foreign body which remained reclusive for nine years.[13]

The literature identifies organic materials as the culprit in most cases and varies with local custom. It includes many materials including vegetable matter, watermelons, and bones.^[14] In our patient it was a mango seed shell, which remained reclusive for 10 days.

CONCLUSION

Air way foreign bodies mostly present as emergencies, but there are also a few cases where they remain reclusive. High index of suspicion with adequate radiological and endoscopic evaluation is a must before embarking on a management protocol.

CONFLICTS OF INTERESTS: None

Informed Consent was taken from the patient.

REFERENCES

- Ghai A, Wadhera R, Hooda S, Kamal K, Verma V. Subglottic foreign bodies- Two case reports. Anaesth, Pain & Intensive Care.2008 Jun; 12(1):27-9
- Hada MS, Samdhani S, Chadha V, Harshvardhan RS, Prakash M. Laryngeal foreign bodies among adults. J Bronchology Interv Pulmonol. 2015 Apr; 22(2):145-7 2. 3
- Mathiasen RA, Cruz RM. Asymptomatic near-total airway obstruction by a Cylindrical Tracheal foreign body. Laryngoscope. 2005; 115:274–7.Bloom DC, Christenson TE, Manning SC, Eksteen EC, Perkins JA, Inglis AF, et al. Plastic laryngeal foreign bodies in children: A diagnostic challenge. Int J Pediatr 4.
- Otorhinolaryngol. 2005; 69:657-62.
- Robinson PJ. Laryngeal foreign bodies in children: First stop before the right main bronchus. J Paediatr Child Health. 2003; 39:477–9. 5.
- Hazra T. K, Ghosh A.K, Roy P, Roy S, Sur S. An impacted meat bone in the larynx with an unusual presentation. Indian J Otolaryngol Head Neck Surg. 2005 Apr; 57(2): 6. 145-146.
- 7 Aylec et al, J Thoracic Cardiovascular Surg 1977;74:145
- Holinger and Holinger, Chest 1978;73:721 9.
- Mundra R.K., Gupta S.K., Mishra C, Bandi A. Unusual foreign body of larynx. Indian Journal of Otolaryngology. 1989; 41: 152-153. 10
- Jackson C, Jackson CL. Quoted by Holinger PH, Holinger CD. Use of the open tube bronchoscope in the extraction of F.B. Chest 1978; 73:721-6. Hazra TK, Dandapat A, Maitra N. A coiled metallic spring in the larynx. Indian J Otolaryngol Head Neck Surg 1993;2:216-7. 11.
- 12 report). Indian Journal of Otolaryngology and Head and Neck Surgery. 1995; 47(3): 205-7.
- 13 Philip A, Sundaresan V.R, George P, Dash S, Thomas R, Job A et al. A Reclusive Foreign
- Body in the Airway: A Case Report and a Literature Review. Case Rep Otolaryngol. 2013: 2013: 347325 Elhassani NB. Tracheobronchial foreign bodies in the Middle East. A Baghdad study. J 14.
- Thorac Cardiovasc Surg. 1988 Oct; 96(4):621-5.