

Chronic Dysphonia in a Child Revealing a Foreign Body: Case Report

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Abstract

Penetration syndrome is a common reason for consultation in the emergency department.

It is a source of morbidity and mortality, especially in children between 1-3 years old. It is manifested by a sudden onset of choking, coughing and cyanosis while the child is perfectly healthy.

We report the case of a 4 years old boy who suddenly presented dysphonia and dyspnea grade 2 (mMRC scale). He was brought to the emergency room after six weeks of persistent symptoms. The parents did not notice the penetration syndrome. Cervical CT and laryngoscopy showed a foreign body in the glottis and sub glottis. The symptoms disappeared after the removal of the foreign body.

If an airway foreign body is suspected, even in the absence of penetration syndrome or specific symptoms, an endoscopic assessment should be released as late diagnosis and treatment can lead to dramatic consequences.

Keywords: Foreign Body; Children; Chronic dysphonia

Introduction

Foreign bodies of upper aero digestive tract are a common situation in children between 1 and 3 years old, with a peak at two years old and from 6 to 8 years old (little handymen). It is a diagnostic and therapeutic emergency as the main risk is death due to isolation of the foreign body in the sub glottis. However, the absence of penetration syndrome can lead to late diagnosis.

We report the case of a 4 years old boy presenting chronic dysphonia with dyspnea grade 2 (mMRC scale); exploration found a foreign body. Diagnostic facilities, complications and treatment will be discussed with literature data.

Clinical Case

It is a 4 years old boy with no medical history, in particular; no asthma, acid reflux, penetration syndrome or any similar cases in the family. He suddenly presented a dysphonia with dyspnea grade 2. The parents did not report penetration syndrome. The dysphonia manifested by a change in tone of the voice which became breathy. The patient was brought to the emergency department after six weeks of persistent symptoms. On the clinical examination, we found bitonal dysphonia, dyspnea grade 2, with general state conservation and no fever.

We discussed the following diagnosis:

- Laryngeal papillomatosis
- Laryngeal hemangioma
- Vocal nodules / polyps
- Epidermal cysts
- Foreign body
- Infection
- Hematoma

Although the beginning of symptoms was acute, but their duration of evolution made us think of tumor pathology in the first, and it is on this point that we chose to start with a cervical CT rather than a laryngoscopy.

Cervical and chest radiography are only released on a stable patient. We look for radiopaque foreign body and some indirect signs such as unilateral pulmonary emphysema or atelectasis [6]. In doubtful clinical forms, chest CT allows a virtual laryngeal- tracheal-bronchial endoscopy revealing sometimes an intraluminal mass suggestive of the diagnosis [6]. The absence of penetration syndrome and the presence of dysphonia can orientate to other diagnosis such as laryngeal papillomatosis, or subglottic hemangioma [7]. Treatment depend on the clinical state of the patient. In case of asphyxia, Heimlich maneuver should be attempted urgently [8] (Mofsen maneuver on infants). Then emergency transfer to a center with a trained team on upper respiratory tract endoscopy. If the state of the child is stable, it is possible to postpone to a few hours the endoscopy, in order to realize it in the best possible conditions. Meanwhile, antibiotics and steroids can be administered to decrease local edema.

Foreign body inhalation can lead to severe complications: Death (more than 300 per year in the US), pneumothorax, pneumonia, atelectasis, tracheal or bronchial granulomas [9].

Conclusion

Foreign bodies of upper airway are common in male children. They may go unnoticed and occur with resistant respiratory infections associated with intermittent dyspnea.

They represent an emergency and can be life threatening. Thus, it is important to consider the diagnosis of a foreign body even in the absence of penetration syndrome and perform a CT and an endoscopy of the upper aero digestive tract for diagnostic and therapeutic purposes.

References

1. Grenoble Medical School [site de la faculté de médecine de grenoble] (2003) Diagnosis of dysphonia (337) Professor Emile REYT - February 2002 (Updated November 2003).
2. Thamboo A, Ludemann JP, Riding KH (2008) Christmas decorations may become aerodigestive foreign bodies. *Int J Pediatr Otorhinolaryngol* 3: 57-60.
3. Sissokho B, Conessa C, Petrognani A (1999) Rigid endoscopy, and laryngo-tracheobronchial foreign bodies in children: Reflections about 200 endoscopies performed in the tropics = Rigid bronchoscopy and foreign body removal in children: Lessons from 200 endoscopic procedures in a tropical setting [Endoscopie rigide et corps étrangers laryngo-trachéo-bronchiques chez l'enfant: Réflexions à propos de 200 endoscopies réalisées en milieu tropical]. *Med Trop (Mars)* 59: 61-7.
4. Ouoba K, Diara C, Dao MO, Ouedraogo I, Sanou I, et al. (2002) Laryngo-tracheo-bronchial foreign bodies in children at the University Hospital Center of Ouagadougou (analysis of 96 cases). *Med Trop (Mars)* 62: 611-4.
5. Tinsa F, Yahyaoui S, Jallouli M, Bousnina D, Slim I, et al. (2010) The larynx and tracheobronchial foreign body in children: predictors of respiratory sequelae [Le corps étranger laryngo-trachéo-bronchique chez l'enfant: facteurs prédictifs des séquelles respiratoires]. *Tunisie Medicale* 88: 330-4.
6. Tan HK, Brown K, McGill T, Kenna MA, Lund DP, et al. (2000) Airway foreign bodies (FB): a10-year review. *Int J Pediatr Otorhinolaryngol* 56: 91-9.
7. Haliloglu M, Ciftci AO, Oto A, Gumus B, Tanyel FC, et al. (2003) CT virtual bronchoscopy in the evaluation of children with suspected foreign body aspiration. *Eur J Radiol* 48: 188-92.
8. Heimlich HJ (1975) A life-saving maneuver to prevent food choking. *JAMA* 234: 398-401.
9. Karakoç F, Karadağ B, Akbenlioğlu C, Ersu R, Yildizeli B, et al. (2002) Foreign body aspiration: what is the outcome? *Pediatr Pulmonol* 34: 30-6.

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