causapedia
hakemli olgu dergisi

e-ISSN:2147-2181

Submucosal Foreign Body in Oropharynx

Orofarenkste Submukozal Yabancı Cisim

Kulak, Burun, Boğaz Hastalıkları

Başvuru: 13.07.2019
Kabul: 20.08.2019
Yayın: 25.10.2019

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Özet

Genellikle çocuklarda görülen yabancı cisim aspirasyonları, nadir olarak erişkinlerde de görülmektedir. Aspire edilen yabancı cisim, genellikle burun ve kulağa yerleşirken daha az sıklıkta orofarenks yerleşimi görülmektedir. Yerleştiği bölgeye göre; yutma güçlüğü, tek taraflı kanlı burun akıntısı ve acil müdahele gerektiren solunum sıkıntısı gibi şikayetlere neden olabilir. Yabancı cisimlerin submukozal yerleşmeleri nadir görülür. Aspire edilen yabancı cisimler çoğunlukla küçük boyutlu olmalarına rağmen bazen de aspire edilmesi güç olan, sert, travmatik ve daha büyük boyutlu materyaller de olabilmektedir. Bu makalede, erişkin erkek olgunun bal tüketiminden sonra bal peteğine ait bir metal telin orofarenks'te submukozal yerleşimine bağlı klinik durumu sunuldu. Orofarengeal yabancı cisimler poliklinik şartlarında, lokal anesteziyle ve endoskopik yöntem kullanarak çıkarılabildiği gibi çıkarımı zor olan vakalarda, olgumuzda da olduğu gibi, genel anestezi altında direkt laringoskopiyle çıkartılmaktadır.

Anahtar kelimeler: *Orofarenks*, *yabancı cisim*, *metal tel*

Abstract

Although, in children, foreign body aspirations are frequently seen, in adults they are rarely seen. The aspirated foreign bodies usually settle into the nose and ear, also less frequently localization site is the oropharynx. A foreign body can cause symptoms such as dysphagia, unilateral bloody nasal discharge and respiratory disorders according to its localization. They sometimes require immediate treatment. Submucosal localizations of a foreign body is seen rarely. Although, aspirated foreign bodies are generally in small size, they can sometimes be rigid, traumatic and larger materials which are hard to aspire. In this article, the clinical condition of an adult male patient, after consumption of honey, depending on the submucosal settlement of a metal wire belonging to honey comb, is presented.Oropharyngeal foreign bodies are removed under local anesthesia with endoscopic methods in outpatient clinic conditions; also they are extracted under general anesthesia with direct laryngoscopy in difficult cases, like our patient.

Keywords: *Oropharynx*, *foreign body*, *metal wire*

Introduction

The presence of foreign bodies in respiratory-digestive tract has been known since 560 before Christ [1]. Aspirated foreign bodies mostly lodge in the ear, nose and throat in children and cause life-threatening problems that may require urgent intervention. Symptoms and signs of pharyngeal foreign bodies vary depending on the localization. Pharyngeal foreign body aspirations may cause dysphagia, pain and respiratory symptoms [2]. The damage occurring in the mucosa of the respiratory - digestive tract is proportional to the duration of foreign body exposure. Granulation tissue formation, erosive lesions and infections may occur over time but these pathological processes can be prevented or terminated with early diagnosis and surgical intervention with less damage. The most important intervention in respiratory-digestive tract foreign body aspiration is the prevention of ingestion [3]. In our case, clinical condition and treatment of a 59-year-old male patient who aspirated a metal wire after eating honey was discussed.

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Çengel Kurnaz S, Aksoy A. Orofarenkste submukozal yabancı cisim. CausaPedia. 2019; 8(3): 103-108.

e-ISSN:2147-2181

Case Report

A 59-year-old male patient with the complaints of neck pain on the left side during swallowing was referred to our otolaryngology clinic from another health care institution with the diagnosis of foreign body aspiration. Informed consent was obtained from the patient. History of the patient revealed that the patient developed inadequate oral intake and neck pain on the left side while swallowing four days before admission to our clinic after eating honeycomb. The patient, who was not aware of the foreign body aspiration, stated that his complaints started after eating honey. Flexible fiberoptic nasopharyngolaryngoscopy (FNL); Karl Storz, Tuttlingen, Germany) examination of the patient revealed edematous mucosa, granulation tissue and secretions in the region extending from left lateral tongue base to vallecula. Other hypopharynx and laryngeal examination were normal and no foreign body was detected. On anterior-posterior and lateral cervical radiographs of the patient, a radiopaque foreign body located in the left and extending to midline and oblique in the 2-4 anterior of cervical vertebra corpus was observed (Figure 1-2).

Figure 1
Lateral cervical x-ray view of the radiopaque foreign body extending vertically at the 2-4th anterior of the vertebral column (black arrow).

e-ISSN:2147-2181

Figure 2
Anterior-posterior cervical x-ray view of the radiopaque foreign body extending from the left submandibular region to the middle line (black arrow).

After normalizing the abnormal coagulation factor of the patient who was receiving warfarin sodium (Coumadin; Zentiva Medical, İstanbul, Turkey) due to deep vein thrombosis with fresh frozen plasma replacement, direct laryngoscopy (Karl Storz 8589C Laryngoscope, Germany) was performed under general anesthesia. Edematous mucosa, granulation tissue and secretions extending from left lateral of the root to vallecula were present on direct laryngoscope examination. Other laryngeal structures were normal. After aspiration of the secretion in the left lateral region, foreign body in the sub mucosa was removed without damaging the mucosa. The foreign body was a rusty black metal wire approximately 4.6 cm in length (Figure 3).

e-ISSN:2147-2181

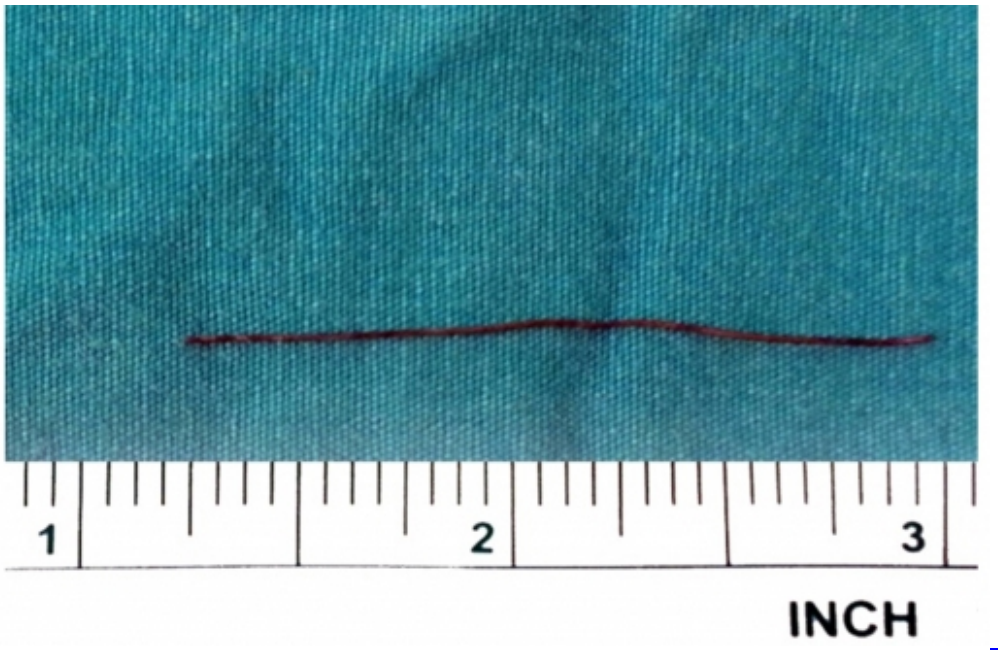

Figure 3
The appearance of post-operative foreign body. (Metal wire is belong to honeycomb)

The patient received anti-tetanus prophylaxis. Parenteral antibiotics and analgesics were initiated postoperatively. The patients was hospitalized for two days and followed up to avoid life-threatening complications such as infection, bleeding and respiratory distress. The patient's complaints diminished significantly. No intraoperative or postoperative complications were observed.

Case Discussion

Foreign body aspiration occurs mostly in children, especially in those aged between six months to three years and in specific adult risk group such as alcohol abusers, those with total tooth loss, psychiatric patients and prisoners [4]. A recent study have revealed that the incidence of foreign body aspiration was higher in adults than that of in children in the Eastern societies [5]. In our 59-year-old patient, total teeth loss was the specific risk factor.

Cultural and regional differences may lead to different types of foreign body aspiration [6]. In adult patients, the most common aspirated foreign body is fishbone usually located in the oropharynx and hypopharynx. It is a common health problem in China. In the United States, 1500 people die each year due to ingested foreign bodies. Submucosal or pharyngeal sharp foreign bodies are rare [5,7].

Admission to hospital after foreign body aspiration generally occurs within the first six hours [8]. Our patient referred to the hospital on the 4th day of the complaints. The time for hospital admission may vary depending on the severity of the organ-specific symptoms. In case of clinical suspicion of foreign body, despite the findings of normal FNL examinations performed in outpatient clinics, bronchoscopy or esophagoscopy should be performed if necessary during have been done direct laryngoscopy under general anesthesia.[3,5].

Imaging of our patient revealed that the foreign body was localized in the oropharynx. Mucosal edema, granulation tissue and secretions were observed in oropharynx on FNL examination but no foreign body was detected. After aspirating the secretions in the tongue base, the foreign body was removed with the help of forceps in the direct laryngoscope examination performed under general anesthesia.

e-ISSN:2147-2181

Submucosal localization of radiopaque foreign body can be detected on X -ray or computed tomography imaging. Silvia et al. reported sensitivity and specificity of radiological imaging after foreign body aspiration to be 73% and 45% respectively [9]. Lateral and anterio-posterior direct cervical imaging revealed a radiopaque foreign body in our patient.

Lai et al. reported high risk factors related to the development of complications after foreign body aspiration. These risk factors are as follows; delays in admission to hospital more than 2 days after aspiration, positive findings on lateral cervical radiograph and foreign body in upper esophagus localization at cricopharyngeal level [7]. In penetrating or pharyngeal injuries, tetanus prophylaxis and antibiotics treatment is required to avoid complications [10]. The damage occurring in upper respiratory-digestive tract mucosa is proportional to the exposure time of foreign body. Granulation tissue formation, erosive lesions and infections may appear in time [3].

On preoperative endoscopic examination of our case, granulation tissue extending from lateral root of the tongue to the valleculla and mucosal edema were observed. Since, the foreign body was a rusty metal wire, the patient received tetanus prophylaxis. Postoperative parenteral antibiotics and analgesics were initiated. No intraoperative and postoperative complications were observed.

Conclusion

Foreign body aspiration is one of the commonly encountered emergencies in the otorhinolarynogology. The diagnosis is established via history, examination and imaging. Late intervention causes mortality and morbidity. Metal wire was removed via direct laryngoscopy without any intraoperative and postoperative complications and any need for invasive surgical procedures in our rare case of pharyngeal submucosal foreign body aspiration in whom foreign body was not detected on clinical examination.

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Information Presantation

e-ISSN:2147-2181

This case was submitted as a poster in the 35th Turkish National Otolaryngology- Head and Neck Surgery Congress (2-6 November 2013,Antalya, Turkey)