

## Foreign Body (FB) in High Respiratory Tract: Case Report

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### Abstract

### Case Report

**Objectives:** The objective of our case report is to describe the clinical, radiological and therapeutic aspects of foreign body aspiration at the ENT department in the Military Teaching Hospital Mohammed V, RABAT, Morocco. **Case report:** a 48-YEAR-OLD patient with no particular history, who presented to the hospital emergency room 4 days after an aspiration syndrome during a dinner. a pharyngo-laryngeal scan was requested urgently and which showed the presence of an embedded chicken bone in the patient's glottic plane, the treatment was rapid and the patient benefited from sedation in the operating room with extraction of the foreign body. **Discussion:** Foreign bodies (FB) represent a pathology frequently encountered in emergency ENT practice. They can constitute a life-threatening emergency due to their appearance or location. FBs in the ENT sphere remain frequent in daily practice, especially in children. Their treatment requires rapid intervention with suitable equipment and trained doctors. Prevention remains the best solution. **Conclusion:** Inhalation of a foreign body is a public health problem. The increase in the incidence of this accident and the epidemiological transition require better prevention. **Keywords:** Foreign bodies, nasofibroscopy, extraction.

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## INTRODUCTION

Foreign bodies are common in ENT consultation. They often make emergencies due to their appearance (sharp, pointed), their location (nasal passages, larynx) and can quickly put the vital prognosis in game. Neglected or old foreign bodies gone unnoticed can lead to complications (traumatic laryngitis, mediastinitis suppurative, dilatation of the bronchi) [1].

We report the clinical case of a foreign body blocked in the larynx as well as our conduct regarding this clinical case.

## CASE REPORT

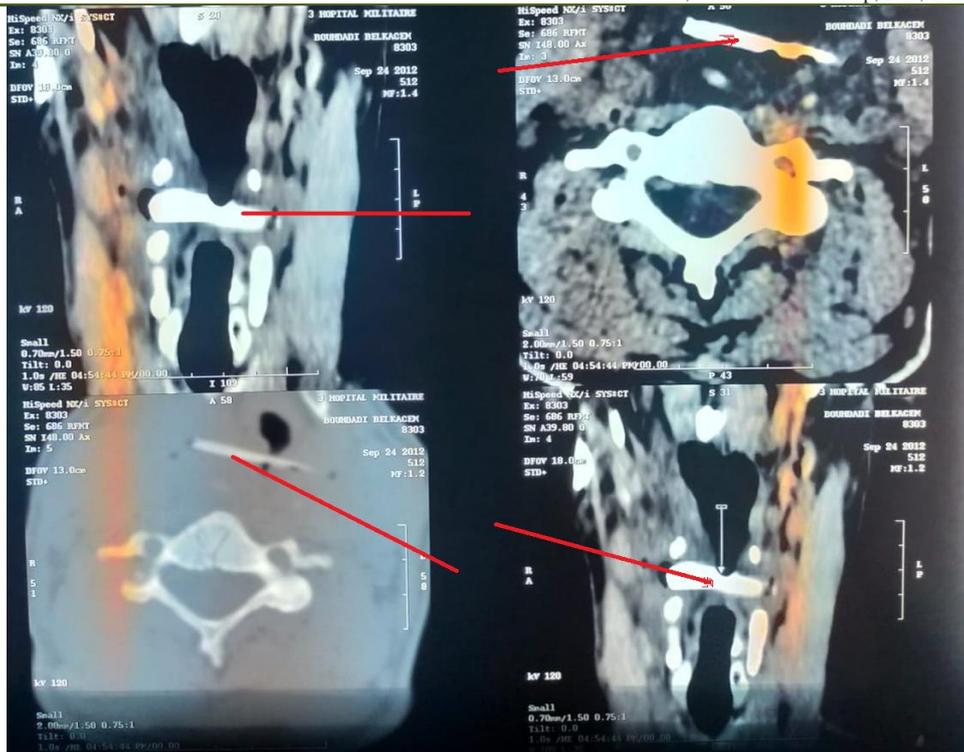
A 48-YEAR-OLD patient with no particular history, who presented to the hospital emergency room 4 days after an aspiration syndrome during a dinner.

Clinically, the patient presented severe dysphagia or even total aphagia, however his breathing was normal. During these 4 DAYS the patient declared having lost 4 kg. The cervical examination was normal, notably absence of painful cervical point.

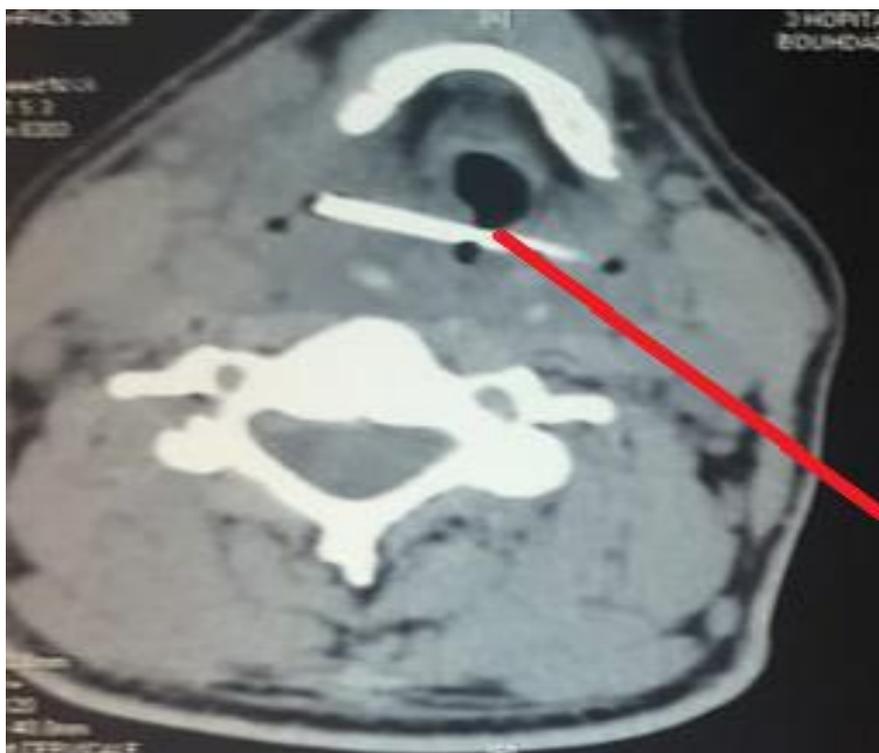
A pharyngo-laryngeal scan was requested urgently and which showed the presence of an embedded chicken bone in the patient's glottic plan (Fig 1, 2).

Nasofibroscopy confirmed the diagnosis: the bone was horizontally impacted with slight edema of the pharyngo-laryngeal tract.

The treatment was rapid and the patient benefited from sedation in the operating room with extraction of the foreign body using Maggie's forceps. Short-term corticosteroid therapy was given to combat laryngeal edema.



**Fig 1:** Scan image showing the arrangement of the foreign body (chicken bone) above the glottic plane



**Fig 2:** Another scan image showing the arrangement of the foreign body (chicken bone) above the glottic plane

## DISCUSSION

Foreign bodies (FB) represent a pathology frequently encountered in emergency ENT practice. They represent according to authors on average 11% of all ENT emergencies. They can occur at any age from the age of grasping and especially in children under 6 years

old, with a clear male predominance [1, 2]. FB is usually accidental occurring during play or meals. It usually occurs in people with normal development. It can be favored by a particular condition: mental retardation, Down syndrome or any other psychomotor disability. In the majority of publications [2-6], the auricular localization predominates between 44% and 68%. The

nature of the FB varies depending on age, location, and particularities sociodemographic [7]. Inert FB of food origin predominate in the literature [5]. they are responsible for more complications correlated with the length of stay in the sphere ENT. Coins are the most common FB found in level of the esophagus in children [5, 7]. Button batteries constitute a special case, particularly dangerous. Their extraction is an extreme emergency before the appearance of complications [8]. The duration of stay of a foreign body is eminently variable from a few minutes to several months. THE diagnosis is obvious during an accident occurring in the presence of those around them or reported by the patient himself, but can sometimes be misunderstood especially in young children. The symptomatology clinical is non-specific and variable depending on the site. THE additional examinations are rarely necessary for diagnosis, since the majority of FB are radiolucent [9]. Direct visualization during clinical and endoscopic examination at rigid optics or nasofibroscope are generally sufficient to identify and locate FB. The laryngeal location is the most feared FB in ENT practice because it is a source of morbidity and mortality, particularly among children under 3 years old. This diagnosis must be discussed before any acute respiratory distress in the child and requires taking in charge in extreme emergency. The treatment consists of extraction the most atraumatic possible of the FB. Several techniques are described, and the choice depends on the location, the type of FB, the age of the patient and the experience of the doctor [10-12]. The extraction is done often without or under local anesthesia by natural means, under visual guidance under Clar mirror, using the microscope or rigid or flexible endoscopy. The use of specific pliers for extraction is the most used technique. Surgical treatment externally has become rare and only concerns old FB and difficult to extract by usual methods, or in the event of complications (perforation or stenosis).

## CONCLUSION

Foreign bodies in the ENT sphere remain a frequent cause in emergency ENT practice; especially in children after the age of grip. Their diagnosis is often easy, but can sometimes be fatal by their location or their nature. In our clinical case, the extraction was after 4 days of inhalation because the patient delayed in consulting which could cause several complications. There majority of complications are observed in patients whose extraction has already been attempted in an inappropriate manner. The management of EC requires suitable equipment and trained ENT doctors. Prevention remains the best solution and involves raising awareness among parents, patients and healthcare personnel.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Author Contributions

All authors contributed to the conduct of this work. All the authors also declare having read and approved the final version of the manuscript.

## REFERENCES

1. Yojana, S., Mehta, K., & Girish, M. (2012). Epidemiological profile of otorhinolaryngological emergencies at a medical college, in rural area of gujarat. *Indian Journal of Otolaryngology and Head & Neck Surgery*, 64, 218-224.
2. da Silva, B. S. R., Souza, L. O., Camera, M. G., Tamiso, A. G. B., & Castanheira, L. V. R. (2009). Foreign bodies in otorhinolaryngology: a study of 128 cases. *Int Arch Otorhinolaryngol*, 13, 394-399.
3. Mangussi-Gomes, J., Andrade, J. S. C. D., Matos, R. C., Kosugi, E. M., & Penido, N. D. O. (2013). ENT foreign bodies: profile of the cases seen at a tertiary hospital emergency care unit. *Brazilian Journal of otorhinolaryngology*, 79, 699-703.
4. Chai, C. K., Tang, I. P., Tan, T. Y., & Jong, D. E. (2012). A review of ear, nose and throat foreign bodies in Sarawak General Hospital. A five year experience. *Med J Malaysia*, 67(1), 17-20.
5. Endican, S., Garap, J. P., & Dubey, S. P. (2006). Ear, nose and throat foreign bodies in Melanesian children: an analysis of 1037 cases. *International journal of pediatric otorhinolaryngology*, 70(9), 1539-1545.
6. Kitcher, E. D., Jangu, A., & Baidoo, K. (2007). Emergency ear, nose and throat admissions at the Korle-Bu Teaching Hospital. *Ghana Medical Journal*, 41(1), 9-11.
7. Mukherjee, A., Haldar, D., Dutta, S., Dutta, M., Saha, J., & Sinha, R. (2011). Ear, nose and throat foreign bodies in children: a search for socio-demographic correlates. *International journal of pediatric otorhinolaryngology*, 75(4), 510-512.
8. Thabet, M. H., Basha, W. M., & Askar, S. (2013). Button battery foreign bodies in children: hazards, management, and recommendations. *BioMed research international*, 2013, 846091.
9. Larimore, W. L. (2008). Options for removing foreign bodies from ear, nose, and throat. *American Family Physician*, 78(1), 28.
10. Al-Juboori, A. N. (2013). Aural foreign bodies: descriptive study of 224 patients in Al-Fallujah general hospital, Iraq. *International journal of otolaryngology*, 2013, 401289.
11. Kharoubi, S. (2010). Corps étrangers des fosses nasales: étude de 700 cas et revue de la littérature. *Journal de Pédiatrie et de Puériculture*, 23(6), 314-321.
12. Rodríguez, H., Passali, G. C., Gregori, D., Chinski, A., Tiscornia, C., Botto, H., ... & Cuestas, G. (2012). Management of foreign bodies in the airway and oesophagus. *International journal of pediatric otorhinolaryngology*, 76, S84-S91.