

Case Report

## Foreign Body Trapped in the Oropharynx Requiring Emergency Tonsillectomy in a Case at Nianankoro Fomba Hospital in Ségou

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### Abstract

**Introduction:** Pharyngeal foreign bodies, particularly in oropharyngeal locations, should raise concerns about the presence of an associated wound. They constitute a common pathology. Their diagnosis is most often easy, but difficult in the case of an unknown foreign body. We report a foreign body embedded in the lateral wall of the oropharynx which required emergency tonsillectomy. **Observation:** This is a 6-year-old child received urgently at the Nianankoro Fomba Hospital in Ségou 6 hours after the introduction of the foreign body (wheel spoke) into the tonsillar compartment. On admission to the ENT and head and neck surgery department, the child's general condition was poor, consciousness remained and the conjunctivas were normal-colored. On oropharyngeal examination, we note a sharp metallic foreign body measuring 30 cm and 2 mm in diameter located at the level of the posterior fold of the right amygdala. Furthermore, there is hypersialorrhea with blood streaking. Faced with the failure of an extraction attempt; we decided to take him to the operating room after a minimum assessment. The immediate postoperative course was unremarkable. The evolution was very favorable on the 10th day of the intervention. **Conclusion:** Pharyngeal foreign bodies constitute a vital emergency due to their appearance or location. Their management requires rapid intervention with suitable equipment. Prevention remains the best solution.

### Keywords

Foreign Body, Emergency, Tonsillectomy

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## 1. Introduction

Pharyngeal foreign bodies, particularly in oropharyngeal locations, should raise concerns about the presence of an associated wound. They are a common pathology and their severity varies greatly [1]. Pharyngeal foreign bodies are mainly encountered in adults. However, they are not exceptional in children [2]. In fact, a pharyngeal foreign body can be an almost harmless incident, but in extreme cases can be responsible for serious complications, sometimes life-threatening [1]. Their diagnosis is most often easy, but it can be difficult in the case of an unrecognized foreign body [2].

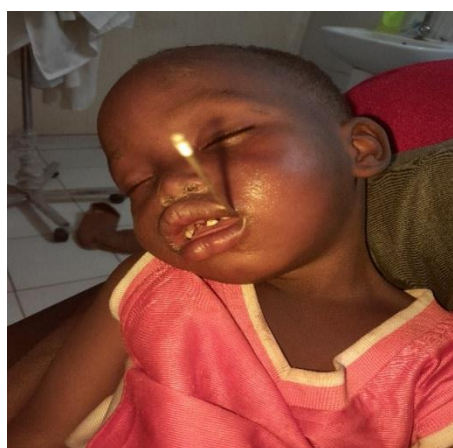
We report a foreign body embedded in the lateral wall of the oropharynx that required emergency tonsillectomy.

## 2. Materials and Methods

### Observation

This is a 6-year-old child admitted as an emergency for a pharyngeal foreign body after several unsuccessful attempts at extraction by the reference health center of BARAOULI.

Admitted to the ENT and head and neck surgery department of Nianankoro Fomba Hospital in Segou 6 hours after the introduction of the foreign body. On admission, the child's general condition was poor (calm and tired), consciousness was preserved and the conjunctivae were normal-colored. On oropharyngeal examination, a sharp metallic foreign body measuring 30 cm and 2 mm in diameter was noted, located at the posterior fold of the right tonsil (Figure 1). Furthermore, hypersalivation with streaks of blood was noted.



**Figure 1.** Foreign body in the mouth.

Given the failure of an extraction attempt; we decided to take him to the operating room after a minimum assessment.

Under general anesthesia, the mouth opener was placed.

After good exposure of the oropharynx; we visualized the point of insertion of the foreign body, which was located at the posterior pillar of the right tonsil (Figure 2). A primary tonsillectomy was performed on the foreign body side; followed by the extraction of the foreign body that was attached to the pharyngeal muscle with the tip placed on the carotid artery. Our intervention was completed by a contralateral tonsillectomy (Figure 3). Postoperatively, he received treatment with analgesic such as paracetamol and antibiotic such as Amoxicillin 500 mg for 3 days. The immediate postoperative course was unremarkable. The evolution was very favorable on the 10th day of the intervention.



**Figure 2.** Bicycle spoke embedded in the pharynx.



**Figure 3.** Foreign body after extraction and tonsillectomy specimen.

## 3. Discussion

Foreign bodies in the pharynx, also known as pharyngeal foreign bodies, are indeed common ENT emergencies that require rapid intervention. These objects can be of animal or plant nature, organic such as pieces of bone tissue from teeth

or dentures, or inorganic such as buttons and details of children's toys. They can cause complete obstruction of the airway, leading to potentially fatal mechanical asphyxia. The main oropharyngeal locations are: the soft palate, the pillars and tonsillar region, the posterior pharyngeal wall, the base of the tongue and the glosso-epiglottic groove [2]. The lesions are lateralized in 69% of cases according to a study by Radkowski et al. [3] on 77 cases. The penetration of foreign bodies can be responsible for deep and lateralized wounds. It is necessary to know how to examine these wounds carefully so as not to overlook rare serious forms, in particular for the carotid vascular axis [3].

The foreign bodies encountered are extremely variable, but food origin is the most frequent. Food gets stuck in the oropharynx during swallowing. The fish bone is the most frequently found foreign body and represents approximately 40% of cases [5, 4]. Fish bones stuck in the oropharynx are often perceived in a lateralized manner, which can point towards the side concerned. The occurrence of a wound is most often linked to the impaction of objects penetrating the oropharyngeal mucosa during a fall in children. The typical case is the oropharyngeal injury caused by the fall of the child who runs with a pencil-type object in the mouth (pencilinjuries like in Anglo-Saxons). The agents mainly found are in the form of a rod [5, 6]: wooden or plastic stick (lollipop), toothbrush handle, pencil, bicycle handle. Respiratory distress may occur, even in the absence of inhalation into the respiratory tract, if the foreign body is large [7].

An initial hemorrhage indicates the presence of a wound. The pain gradually gives way to discomfort that worsens when swallowing. Radiated pain such as reflex otalgia may be reported, particularly in lateralized trauma. Dysphagia and hypersialorrhea may be observed [5].

The physical examination allows for careful inspection of the oral cavity and oropharynx. The foreign body (fish bone, small bone fragment, etc.) can be visualized, embedded more or less deeply in the soft tissues, and is sought by taking care to visualize the glossoatonsillar grooves, the pillars, the tonsils, the posterior oropharyngeal wall. The base of the tongue is more difficult to inspect. If the foreign body is not visualized, the examination is completed by a gentle digital touch of the base of the tongue, an indirect laryngoscopy or a nasofibroscope under local anesthesia. If no foreign body can be detected, it may be useful to call the patient back after a period of 48 hours, to assess the evolution of the symptoms and perform a new clinical examination. According to Jones et al. [5], an oropharyngeal foreign body is found, depending on its location, only in 59 to 68% of cases where the patient describes an ingestion with the impression of initial painful blockage. In the event of a wound, it is important to specify the location, limits, depth, presence of contusion, necrosis, soiling, or telluric debris. The use of examination under general anesthesia is sometimes necessary, particularly in children, if the history and symptoms are suggestive of the entrapment of a foreign body that is not found on examina-

tion [3, 5].

Infectious complications are dominated by para- or retropharyngeal abscess, which is the most frequent [8, 9]. Other possible but rare complications: cervicofacial cellulitis including necrotizing fasciitis (exceptional), mediastinitis, spondylodiscitis and bronchopneumopathies [10-13]. Neurological complications are rare but constitute a clinical entity, initially described by Cadwel. They should be feared in the event of deep lesions of the lateral region of the soft palate or the peritonsillar region [14-16]. The mechanism considered is a tear of the intima of the internal carotid, by crushing of the artery between the CE and the transverse processes of the second and third cervical vertebrae. Vascular thrombosis occurs after a free interval, even in the absence of arterial injury, and there are usually no associated hemorrhagic symptoms [17].

The management of patients with suspected foreign bodies is a medical-surgical emergency. It depends on the location (naso-, oro- or hypopharyngeal), the nature of the foreign body and the data from the clinical examination and most often imaging which must specify the extent of the lesions and allow the type of management to be specified. When the practitioner is unable to establish an assessment of the lesions by a clinical examination in consultation, or when there is a diagnostic doubt, endoscopic examination under general anesthesia (GA) is justified, a normal radiological examination does not call into question the diagnosis [4, 5].

Prevention is key to avoiding these emergencies. For example, supervising children while they play, avoiding leaving small, durable objects within reach, and educating children about the risks of swallowing dangerous objects can help reduce the number of cases of pharyngeal foreign bodies [6].

## 4. Conclusion

Pharyngeal foreign bodies are common emergencies in ENT and can constitute a life-threatening emergency due to their appearance or location. They can cause trauma to the soft palate and oropharynx, which are common in preschool children. This is due to their propensity to fall easily while carrying objects in their mouth. Their management requires rapid intervention with suitable equipment and trained ENT physicians. Prevention remains the best solution.

## Abbreviations

ENT	Ear Nose Throat
GA	General Anesthesia

## Conflicts of Interest

The authors declare no conflicts of interest.

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