

# An unusual complication of an attempt to open the airway in a choking child

## Introduction

The use of a blind finger sweep to clear the upper airway can cause subsequent problems when used in paediatric practice. This case report adds support to recommendations that this procedure should not be used, while simultaneously describing a complication the authors have not come across in the published literature.

## Discussion

Choking results from sudden foreign body obstruction of the upper airway, which may be partial or complete. Up to 95% of patients present with coughing, gagging, stridor, hoarseness or wheezing, often associated with respiratory distress. Foreign body obstruction is a major cause of accidental death in infants and is responsible for 7% of deaths in children under 4 years of age (Lavoie, 2004). Food products, including sweets are responsible for a significant proportion of choking episodes in younger children (aged 1–4 years). These incidents are often witnessed by a carer, who may attempt intervention.

**Figure 1. Foreign body (larger object) and right tonsillar tissue.**



**Dr D Gjoni** is Trust Grade Doctor in Otorhinolaryngology, **Mr D Mbamalu** is Consultant in Emergency Medicine, **Mr A Banerjee** is Consultant in Emergency Medicine and **Mr KK James** is Associate Specialist in Otorhinolaryngology, Chase Farm Hospital, Enfield EN2 8JL

Correspondence to: Mr A Banerjee

Current guidelines advise against the use of blind finger sweeps in treatment of foreign body airway obstruction in children, as foreign body impaction may result and vomiting may be induced. Advanced Paediatric Life Support (2005) guidelines suggest that if a foreign body is readily visible and accessible in the mouth it may be removed under direct vision.

**Figure 2. Operative view of injury site.**



## Conclusions

This case report provides further evidence against blind sweeping for foreign bodies in the upper airway, despite the ultimately successful outcome (Paediatric Basic Life Support, 2005). This is a previously unreported complication of accidental traumatic partial tonsillectomy, that is potentially fatal. **BJHM**

Advanced Paediatric Life Support (2005) *Basic Life Support The Choking Child*. 4th edn. ALS Group, Manchester: 32–6

Lavoie J (2004) Tricky problems in pediatric anesthesia. *Can J Anesth* **51**: R1–R6

Paediatric Basic Life Support (2005) *Foreign Body Airway Obstruction*. Resuscitation Council UK, London ([www.resus.org.uk/pages/guide.htm#algs](http://www.resus.org.uk/pages/guide.htm#algs) accessed 11 June 2009)

## Case Report

A 3-year-old boy was brought to the emergency department with bleeding from the throat. Earlier that day he had been given a boiled sweet by an older cousin. This was followed by an episode of choking and apnoea. His mother intervened, placing her finger into his mouth and attempting to extract the offending sweet. The sweet was delivered along with some fleshy tissue, followed by bleeding from the throat.

On arrival in the emergency department, the child was alert, with no evidence of respiratory distress at rest. Vital signs were: heart rate 120 bpm, blood pressure 108/70 mmHg, respiratory rate 20/minute, and oxygen saturation on 15 litres of oxygen (FiO<sub>2</sub> 85%) 100%. Bloody secretions were noted at the mouth. Airway patency was maintained.

Examination of the throat showed loss of the upper third of the right tonsil. There was no active bleeding, there being clotted blood in the tonsillar fossa. Respiratory and cardiovascular examinations was normal. The sweet and the missing part of the tonsil were available for inspection (Figure 1).

Initial management included intravenous access, venous blood testing, including blood grouping, and the provision of analgesia (rectal paracetamol). The child was taken to the operating theatre where loss of the upper third of the right tonsil was confirmed (Figure 2). The remainder of the tonsil was nearly completely detached from the tonsillar fossa, being attached only by a small mucosal pedicle. Bilateral tonsillectomy was performed, and the right-sided palatal laceration sutured. An uneventful recovery was followed by discharge the following day.

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