

# Tonsillar haematoma presenting as a large oropharynx mass caused by toothbrush trauma

## Introduction

Gingival bleeding or haematoma is a common condition resulting from toothbrush trauma, especially in patients with a bleeding disorder. This is the first reported case of haematoma of the tonsil presenting as a large intraoral mass which was caused by toothbrush trauma.

## Discussion

Toothbrush trauma causing gingival bleeding or haematoma is common, especially in patients with uncontrolled bleeding disorder. This patient was healthy and had no significant past medical history.

The toothbrush was invented by the Chinese in the 15th century. This was made of hairs from the neck of a Siberian wild boar, which was fixed to a bamboo or bone handle. Although promoted by French dentists in the 18th century, the toothbrush was unpopular and not widely available. The preferred method then was to use a goose feather toothpick, or one made of silver or copper. The toothbrush gradually came into everyday use after DuPont developed the nylon bristle toothbrush in 1938. More recently, the toothbrush has been used to debride facial wounds and even to relieve pruri-

tus ani (Arnstein and Richards, 1993; Kumar, 2001).

Intraoral injury caused by toothbrush is not uncommon. Cases of penetrating injury in the pharynx and toothbrush embedded in the buccal mucosa have been reported in children (Moran, 1998; Tanaka et al, 2002). Accidental swallowing has also been described in two patients with bulimia attempting to induce emesis with the toothbrush (Wilcox et al, 1994).

This case is unique in several aspects. The patient presented acutely with an intraoral mass. It is postulated that the excessive direct force applied by the toothbrush bruised the tonsil. The ensuing swelling caused an area of the tonsil to be twisted on a pedicle. A haematoma was thus formed, which gradually enlarged as a result of poor venous drainage caused by the torsion. This resulted in the foreign body sensation in the patient's oropharynx. The torqued tonsil eventually infarcted.

While there was no evidence of respiratory distress in this patient, it must be remembered that any large mass in the oropharynx can produce a ball-valve effect leading to catastrophic complete airway obstruction. This case also highlights the importance of education in proper toothbrushing technique and serves to remind clinicians of the unusual hazards of using this seemingly harmless invention. **BJHM**

Arnstein PA, Richards AM (1993) The use of a toothbrush to debride facial wounds. *Br J Plast Surg* **46**: 627

Kumar M (2001) Don't forget your toothbrush! *Br Dent J* **191**: 27–8

Moran AJ (1998) An unusual case of trauma: a toothbrush embedded in the buccal mucosa. *Br Dent J* **185**: 112–14

Tanaka T, Sudo M, Iwai K et al (2002) Penetrating injury to the pharynx by a toothbrush in a pediatric patient: a case report. *Auris Nasus Larynx* **29**: 387–9

Wilcox DT, Karamanoukian HL, Glick PL (1994) Toothbrush ingestion by bulimics may require laparotomy. *J Pediatr Surg* **29**: 1596

**Figure 1.** The oropharyngeal mass was attached to the tonsil on a pedicle.



## Case Report

A 43-year-old man was referred urgently by his GP with a large mass at the back of his throat. The patient had complained of a mild foreign body sensation for the past 3 days, but was distraught to see the mass in the mirror while he was flossing. On further questioning, he recalled brushing his teeth too vigorously and having injured himself. He reported spitting out some blood into the sink but not being unduly distressed. He was a non-smoker and had no significant past medical history.

On examination, there was a 3 cm smooth mass in the right oropharynx (Figure 1). The mass was soft and attached to the right tonsil via a pedicle. Flexible nasendoscopy was normal and there was no evidence of airway obstruction by mass effect. Under local anaesthesia, the mass was removed with the use of a snare. Full blood count and coagulation studies were entirely normal. Follow-up outpatient clinic at 4 weeks was unremarkable. The tonsillar remnant had healed completely and there was no suspicion of any underlying pathology. Histopathology was consistent with that of infarcted tonsillar tissue.

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