ORIGINAL RESEARCH PAPER

Otorhinolaryngology

FROM MORNING ROUTINE TO MEDICAL EMERGENCY: A TOOTHBRUSH MISHAP

KEY WORDS:

Dr. Cherry* Assistant Professor, Department of Otorhinolaryngology – Head and Neck Surgery, Bharati Vidyapeeth Hospital, Pune, India. *Corresponding Author

Dr. Shruti Parlikar Junior Resident, Department of Otorhinolaryngology – Head and Neck Surgery, Bharati Vidyapeeth Hospital, Pune, India.

ABSTRACT

Accidental intraoral injuries in children are commonly caused by falls or foreign objects inserted into the mouth. Among these, toothbrush-related trauma is an underreported cause of soft palate lacerations. We report a case of a young child presenting with post-traumatic soft palate laceration secondary to a toothbrush injury. The case highlights clinical presentation, management, and the importance of conservative therapy in uncomplicated palatal injuries[1,2].

INTRODUCTION

Toothbrush-related oropharyngeal trauma is an uncommon but well-documented cause of palatal and pharyngeal injury in children; such injuries most often result from falls while a child holds a toothbrush in the mouth. Several case series and reviews note that most injuries are minor and heal with conservative management, but rare cases may penetrate deep spaces or be associated with serious vascular or neural complications[3–6]

Case Presentation

A young male child presented with a history of a toothbrush injury to the oral cavity approximately 1 hour prior to presentation. The parent reported painful mouth opening but no active oral bleeding or respiratory distress.

Oral cavity examination revealed a linear laceration (~1 cm) with slough and mild erythema on the left soft palate, consistent with recent trauma. There was no active bleeding or expanding hematoma at the time of examination. Anterior and posterior pillars appeared normal, tonsils were Grade I bilaterally, and the posterior pharyngeal wall was clear.

Nose: NAD

Ears: TM intact bilaterally

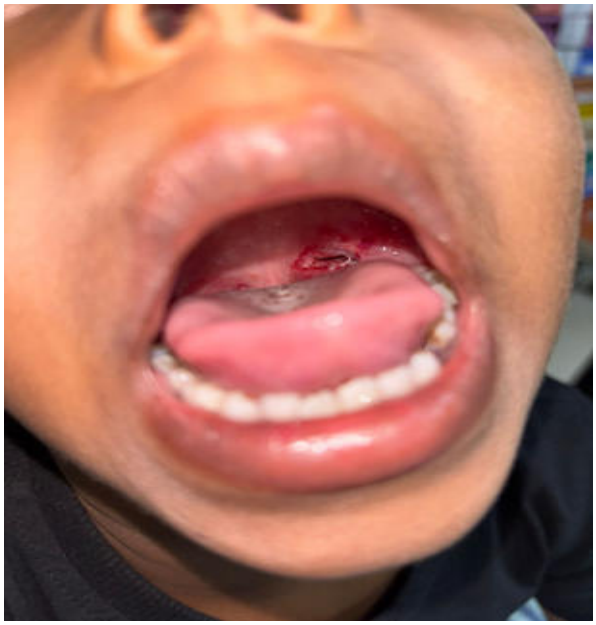

Fig. 1. Clinical photograph showing a linear laceration with slough on the left soft palate following toothbrush trauma.

Diagnosis

Left soft palate laceration (post-traumatic, toothbrush injury)

Management

Conservative outpatient management was elected given the lack of active bleeding, airway compromise, or neurological signs. The child was managed with oral antibiotics (Amoxicillin–clavulanate syrup for 7 days)[3]

Analgesics were prescribed as needed, along with local antiseptic mouthwash or gargles and topical antiseptic gel application. A soft diet was advised, and parents were instructed to observe for any bleeding, fever, or difficulty swallowing.

Outcome

At 7-day follow-up, the wound showed significant granulation and reduction of slough with no clinical signs of infection or neurovascular complication. The child tolerated oral intake and had no fever or systemic symptoms.

DISCUSSION

Impalement or penetrating injuries of the soft palate/oropharynx in children are typically the result of falls while holding objects such as toothbrushes, pens, or sticks in the mouth[5,7]

Most are minor and heal with conservative measures; however, rare but serious complications such as deep space infection, abscess formation, and internal carotid artery injury have been reported[6,8,9]

Indications for operative exploration or imaging include retained foreign body, large through-and-through wounds, expanding hematoma, ongoing bleeding, or suspicion of vascular involvement[3,9]

We managed this child conservatively with antibiotics, analgesia, topical antisepsis, and close follow-up; the outcome was favorable, consistent with multiple case series and reviews showing good results for non-operative management in uncomplicated cases[5,10–12]

CONCLUSION

Toothbrush-related oral injuries in children are preventable; supervision during brushing and use of age-appropriate toothbrushes can reduce risk. In the absence of airway compromise, active bleeding, deep penetration, or neurologic/vascular signs, conservative outpatient management with antibiotics, analgesia, local care, and close follow-up is usually sufficient[5,6]

Conflict Of Interest: nil

Ethical Clearance: received

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