Traumatic dislocation of the mandibular lateral incisor into the nasal floor

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DESCRIPTION

A 23-year-old man reported for the management of panfacial fractures allegedly sustained from repeated assault with an iron rod 10 days earlier. Clinical examination revealed partially healed lacerations in the forehead, lower lip and palate, and multiple facial fractures including a palatal split.

Intraoral examination revealed luxation and grade III mobility of the maxillary central incisors and a crown fracture in the left maxillary lateral incisor. The right mandibular lateral incisor was missing, with the fracture line passing through its socket (figure 1A). Given the inability of the patient to provide reliable information and the clinical examination failing to find the tooth in adjacent tissues, it was dismissed as avulsed. To our surprise, the diagnostic CT revealed the missing tooth in the right posterior nasal floor between the hard palate and nasal mucosa (figures 1B, C and 2). Nasal endoscopy to retrieve the tooth was unsuccessful due to its submucosal location in the nasal floor. It was later retrieved through the palatal split during the internal fixation of the facial fractures

Figure 3 Intraoperative view of the tooth (shown in inset) being retrieved through the palate.

(figure 3). Considering the nature of injury and the position of dislocation, it appears that the palatal laceration and split had occurred initially allowing the tooth to dislodge through it during subsequent blow(s).

Currently available reports on traumatic displacement of teeth into the nasal cavity have been restricted to those from the maxilla.¹⁻³ The dislocation of an intact mandibular incisor into the posterior nasal floor through the palate is very rare and

Figure 1 The three-dimensional reconstruction from CT scan showing the missing right mandibular lateral incisor (A) dislocated to the right posterior nasal floor (B and C).

Figure 2 The two-dimensional views from CT scan showing the palatal split and the dislocated tooth between the hard palate and nasal mucosa in the right posterior nasal floor.

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has not been previously reported. Clinicians should be aware of and consider such uncommon patterns of tooth dislocation when confronted with teeth missing following maxillofacial trauma.

Learning points

- ▶ Clinicians should look beyond adjacent tissues when accounting for teeth missing after maxillofacial trauma.
- ▶ A diligent clinical and radiographic evaluation, inclusive of such unusual locations, should be undertaken before dismissing teeth as being avulsed.

Competing interests None declared.

Patient consent Obtained.

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