Retrieval of unusual foreign body from the lip

Anuj Dhadhich,* and Prashant Jaju†

* Senior lecturer, Dept of Oral and Maxillofacial Surgery. †Senior lecturer, Dept of Oral Medicine, Diagnosis and Radiology. MGV’S KBH Dental College and Hospital, Nashik, Maharashtra, India.

Abstract
We report an interesting case of retrieval of unusual foreign body from the upper lip following facial trauma. Oral maxillofacial surgeon’s ability to remove the foreign object depends upon proper utilization of imaging modality. Computed tomography (CT) is not always available, and in such situations oral and maxillofacial surgeons have to rely on the conventional two dimensional imaging modalities for localization of the object. We present a case where unconventional radiographic techniques were used, leading to successful surgical removal of foreign bodies.

Key words: Foreign body; Facial trauma; Conventional imaging.

Introduction
There are innumerable instances of foreign body getting embedded into the maxillofacial tissues in the emergency surgical practice following facial complex trauma. In such emergency situations, oral and maxillofacial surgeons are frequently facing situations requiring quick decisions in dental offices or even in hospitals where advanced imaging technologies, like CT or magnetic resonance imaging (MRI) are not available. In this situation, it is advisable to use right angle conventional radiographic techniques in order to complement the diagnosis and to correctly locate the foreign body (1).
Foreign body in the lip

We report an interesting case of localization and retrieval of foreign body from upper lip by utilizing the right angle technique of localization.

Case report
A 35-year-old man suffered a traffic accident, with facial trauma, presenting upper lip lacerations and nasal bleeding. The patient received emergency care at a general hospital, where a maxillofacial surgeon was not available. Only labial mucosa sutures were done, without any imaging. After 10 days, the patient was referred to our office, presenting with pain in the left nasal area and swelling as well as signs of infection of the upper lip. All the teeth were present and there was no history of past dental treatment. A Water’s view was advised which revealed a well defined rectangular radiopacity measuring 2cm X 1 cm on the left side (Figure 1).

In order to disclose the real anteoposterior position of the foreign body inside the upper lip, a lateral skull radiograph was advised. Foreign body appeared to be radiopaque pointed structure positioned close to the anterior nasal spine (Figure 2).

Figure 1: Waters view radiograph depicting opacity on left side

Figure 2: Lateral skull radiograph demonstrating a structure close to anterior nasal spine

Figure 3: Foreign body retrieved from the upper lip

Under local anesthesia surgical exploration was performed in the upper lip, and a 2 cm in length pointed sharp object was retrieved and sutures were placed (Figure 3). The patient reported that object retrieved was the top of small flag placed in his vehicle. One month postoperative follow up revealed no complications.
Foreign body in the lip

Discussion

Foreign bodies are often encountered by oral and maxillofacial surgeons and may present a diagnostic challenge to the surgeon due to many factors such as the size of the object, the difficult access and a close anatomical relationship of the foreign body to vital structures (2-4). The foreign bodies removal in the facial region implies on danger of damaging important anatomical structures. Even if the exact position is known from imaging data, the accurate reproduction of its position in the patient’s body can be difficult if the foreign body is not adjacent to a definitive anatomical landmark. The major determinant of injury is behaviour of penetrating object within the tissue which in turn depends on deformation, yaw (rotation about the long axis) and fragmentation of the projectile (5). The foreign body removal can be delayed in approximately one third of all foreign bodies, because they are initially radiographically missed or misdiagnosed. Occasionally, foreign bodies may be retained for some time causing persistent and distressing symptoms (6). In the present case, lack of proper initial clinical examination and radiographs was the cause for delay in identification of the foreign body. Modern imaging equipments are not always at the trauma surgeons dispense, and in such situations conventional radiographs with right angle view can effectively locate the position of the foreign object. Waters view and lateral skull radiograph in this case presented a right angle view and provided the surgeon with exact location of the foreign object (7).

Conclusions

Computed tomography and magnetic resonance imaging are not always available and accessible to oral and maxillofacial trauma unit. Sound knowledge of radiology coupled with accurate clinical examination can accurately determine and locate foreign objects, thus providing effective solutions for the attending health professional in emergency situations.

References