INTRODUCTION

Displacement of impacted third molars is frequently mentioned in oral and maxillofacial surgery textbooks, but rarely reported. However, should this complication arise in general practice, the clinician should not embark upon potentially complicated and hazardous surgical procedures to retrieve the displaced tooth. The general dentist should be able to execute a complicated exodontia, so that these complications can be avoided. Presenting this case, the authors want to emphasize the importance of the preoperative surgical planning of extraction of the maxillary posterior teeth so that complications could be avoided and they also want to demonstrate the surgical technique for retrieval of displaced teeth.

CASE REPORT

A 24 years old male patient named Azhar reported to the outpatient department of oral surgery unit Abbasi Shaheed Hospital with a presenting complaint of pain after unsuccessful extraction two days earlier by a private dental practitioner. The patient described that he was suffering from pain since one week when he decided to visit a dentist nearby his residence. The doctor advised him third molar extraction as according to him was infected due to caries. The doctor attempted but soon he finished the treatment calling the extraction is done without showing the evidence of the tooth presence or displacement. He also prescribed the patient with antibiotics and pain killers for 3 days. According to the patient it was not satisfactory for him as the pain was not relieved completely and the ab-
Displacement of maxillary third molar in the infra-temporal fossa

Displacement of maxillary third molar in the infra-temporal fossa (fig 1). The patient was informed about the diagnosis and counseled for the surgical retrieval of the displaced molar. Written and informed consent was taken from the patient. Using aseptic technique local anesthesia (Posterior superior alveolar nerve block and infiltration) was given. A cm incision was given over the posterior maxillary buccal sulcus. Tooth was recovered (fig 3) using a curved artery clamp and digital manipulation since it was held in the soft tissue slipping out of the socket. The incision was sutured with vicryl 4/0 and a pressure pack applied for hemostasis. The patient was prescribed with painkiller (Ibuprofen 400mg T.i.d) for 3 days and recalled after a week. Follow up showed no symptoms of pain or swelling and the socket was in healing phase. Monthly review showed no post-surgical complication.

DISCUSSION

Displacement of maxillary third molars into the infratemporal fossa is usually associated with an incorrect extraction technique, distolingual angulated tooth, decreased visibility during surgical removal or limited bone distal to the third molar. The exact anatomic location of the displaced tooth is not easy to determine clinically what represents a surgical problem. These teeth usually displace through the perios-...
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lateral pterygoid plate and inferior to the lateral pterygoid muscle. Nevertheless, this position may change up-wards into the skull base if the tooth is attempted to retrieve.3, 6 Radiographic examination is indicated to locate the displaced tooth. Occlusal, panoramic, occipitomental or lateral radiographs can be used, although CT-scan is the powerful and useful technique, because it provides an exact and anatomical location.4, 6 Clinically, the patient may be asymptomatic or has symptoms as swelling, pain, limitation of mandibular movements or trismus, if fibrosis is present.4

In the present case patient came with a complaint of pain and mild swelling however there was expected post-operative swelling on examination and no signs of infection observed. Therapeutic attitude is based on clinical symptoms and signs, on surgeon preferences and of course on patient decision. The complex anatomy of the infratemporal fossa, the potential morbidity and the difficulty to obtain a good surgical exposure of the region are limiting factors for the treatment.7 Complications may increase if the retrieval procedure is delayed such as infection, foreign body reaction or trismus.6 According to some authors, displaced teeth can migrate downwards into the oral cavity, allowing an easy surgical removal.1, 6 Nevertheless, others, reported migration which is impossible because of fibrosis and anatomic boundaries.4 Several surgical approaches can be used such as coronal, Gillies, Caldwell-Luc or resection of the coronoid process.2, 8 We preferred the intraoral approach because the tooth was not displaced to a great deal, as appreciated by digital palpation and patient was not willing for general anesthesia.

CONCLUSION

This case reminds us that the best way to prevent a displaced maxillary third molar is to evaluate the condition of the tooth carefully preoperatively, select adequate instruments and technique, and take good care during extraction. If an accident does occur, dentists should decide whether to retrieve it immediately by themselves or refer the case to an oral and maxillofacial surgeon, and should not try to remove the displaced tooth without proper assurance. Localization with images and proper surgical methods are the keys to retrieve the displaced tooth or its fragments successfully. When immediate retrieval is decided on, Posterior-anterior and lateral skull views are useful in localizing the displaced fragment. When the fragment moves into a deeper space or the retrieval has been delayed for months, three-dimensional CT seems to be a better choice.

REFERENCES