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Case Report

A case of dilacerated impacted maxillary third molar: A case report

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ABSTRACT:
Dilaceration is a disturbance in tooth formation that produces a sharp bend or curve in the tooth anywhere in the crown or the root. Although this anomaly is likely developmental in nature, one of the oldest concepts is that dilaceration is the result of mechanical trauma to the calcified portion of a partially formed tooth.This report presents a maxillary third molar with dilacerated root

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INTRODUCTION

By definition, dilaceration is an abnormal angulation or bend in the root and less frequently, the crown of a tooth. Most cases are idiopathic and have no clinical feature [1]. In limited cases with recognized cause, injury was the first reason. Trauma can displace the calcified portion of tooth germ so that the non-calcified part of tooth is formed in an abnormal angle. In rare cases, this bending occurs due to the presence of cysts, tumours or hamartomas [2]. While it may be clinically detected by palpation, high in the labial sulcus or hard palate [3]; periapical radiography is the best method to detect this abnormal condition and is characteristic [3-4]. The mesial or distal dilaceration is obviously detectable in periapical radiographs but buccal or lingual dilaceration appears as a round opaque region with radiolucent area in its center (bull's eye appearance) [1]. Hamasha et al.13 reported the prevalence of dilaceration to be 3.8%, and it was highest in lower third molars (19.2%), lower first molars (5.6%), and upper second premolars (4.7%) [4]. Thongudomporn and Freer reported that dilaceration is the least prevalent anomaly of the 5 dental anomalies studied in a group of orthodontic patients [5]. The deviation of the roots of upper lateral incisors from the normal axis by more than 208, was reported to be 97.9% of cases [6].

CASE REPORT

A 24-year-old female reported to the Department of Oral and Maxillofacial Surgery with a complaint of pain and food lodgment in upper right back tooth region for two weeks. Pain was continuous, severe and aggravated in night or on lying down. The tooth shows deep dentinal caries on clinical examination.The patient was placed on antibiotics for three days. Planned surgical removal of the third molar was scheduled for a week later. With informed consent local anesthesia was administered using 2% lignocaine with adrenaline. The buccal area is anesthetized by posterior superior alveolar nerve block which is given by inserting the needle at the height of the mucobuccal fold above and distal to distobuccal root of the third molar. Greater palatine nerve block was given 1–2mm anterior to the greater palatine foramen to anesthetize the palatal area. Triangular flap was elevated using No. 9 periosteal elevator. Third molar was extracted using Cryer's elevator. Initially wedge principle was used followed by wheel and axle principle. Tooth is removed along the path of insertion. And dilacerated root was not fractured because of the proper use of technique. After achieving hemostasis, suturing was done using 30 vicryl suture and post operative instructions were given.

DISCUSSION

Dilaceration is the 90° or greater angulation of the tooth or root along the long axis of tooth or root towards mesial or distal direction. It may also be defined as apical deviation of the root by 20° or greater. Dilaceration is considered to be due to trauma to the developing tooth. Third molars commonly present with aberrations in number or shape of root and root canals. Prevalence of anatomical variations is higher inmandibular third molars compared to maxillary third molars. In third molars, root dilacerations may occur anywhere along the root length and can include one or all roots. They are generally directed distally.

CONCLUSION

Rootdilacerationis not detected clinically. Dilacerated root may complicate extraction, endodontic treatment, orthodontic treatment, or preclude use as abutment. The curve or bend may occur anywhere along the length of the tooth, sometimes at the cervical portion, at other times midway along the root or even just at the apex of the root, depending upon the amount of root formed when the injury occurred.

AUTHORS CONTRIBUTION

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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