A Rare Clinical Phenomenon of Six Distomolars: A Case Report

H T Arvind Rao1, Mohammed Iqbal2, Anand Gupta3
1Reader, Department of Oral and Maxillofacial Surgery, Yenepoya Dental College, Mangalore, Karnataka, India, 2Reader, Department of Orthodontics and Dentofacial Orthopedics, Yenepoya Dental College, Mangalore, Karnataka, India, 3Post Graduate, Department of Oral and Maxillofacial Surgery, Yenepoya Dental College, Mangalore, Karnataka, India

The report presents a case of a rarely occurring totally impacted two bilateral maxillary distomolar and single bilateral mandibular distomolar. The appearance of supernumerary teeth is a relatively uncommon dental anomaly and it is rare for patients to have six impacted distomolars. The aim of this case report is to describe the presence of bilateral distomolars in the maxilla and mandible in a young female patient aged 19 years. Orthopantomogram revealed impacted six bilateral distomolars. Following orthodontic treatment, the patient was referred for removal of distomolars along with all the four impacted third molars under local anesthesia.

Keywords: Distomolar, Impacted, Supernumerary

INTRODUCTION

Extra teeth in the dentition are termed “supernumerary teeth” and are a very well-known phenomenon. Supernumerary teeth in the posterior region of the jaw are divided into paramolars and distomolars. Distomolars are located distal to the third molar, and paramolars are located buccally or palatally to one of the molars.

Despite the advances in understanding different stages of tooth differentiation, the etiologic factors responsible for the formation of supernumerary teeth are not completely understood. Some studies suggest environmental factors as contributing agents while others emphasize the role of genetic patterns in the etiology of supernumerary teeth. Sometimes these extra teeth are considered as the third dental series, although the important genes are not completely recognized.1,2

Supernumerary teeth may be single or multiple, occur unilaterally or bilaterally, in one or both jaw3 but occurs more commonly in anterior maxilla than in posterior maxilla and mandible.4 The condition of multiple supernumerary teeth is usually a result of developmental disorders such as cleft lip and palate, cleidocranial dysostosis, and Gardner’s syndrome. In nonsyndromic patients, the prevalence of extra teeth in the molar regions of both jaws is rare.5 Supernumerary teeth can cause esthetic imperfections, dislocation or rotation of permanent teeth, crowding, dilaceration, dental problems, occlusal inconsistencies, functional problems, obstruction or retardation of permanent tooth eruption, and incidence of tooth impaction. Impacted teeth can result in decay, pulp disease, periapical and periodontal disease, temporomandibular joint disorders, mandibular fracture, infection of fascial spaces, root resorption of adjacent teeth, and even oral and maxillofacial tumors.6 7 Therefore, some studies recommend that management of this condition needs thorough clinical and radiographic evaluations and regular follow-up visits for prevention, while others suggest the prophylactic surgical extraction of supernumerary teeth as the treatment of choice.3,8

This report presents a rare case with nonsyndromic multiple distomolar supernumerary teeth. The article also enumerates the surgical procedures for extraction of impacted the third molar and distomolar.

CASE REPORT

A 19-year-old healthy female patient reported to the Department of Oral and Maxillofacial Surgery, Yenepoya Dental college, Mangalore, for a prophylactic removal of upper and lower third molars for orthodontic treatment. The patient had been managed orthodontically due to malocclusion. Following a clinical examination, panoramic radiographs revealed the presence of two impacted
distomolar teeth on both sides of the maxilla, and single impacted distomolar on both the sides of mandible along with impacted third molars (Figure 1). The teeth had normal morphology, the crown and the root of first maxillary distomolar were significantly developed but were smaller in size. The roots of the second maxillary bilateral distomolar and mandibular bilateral distomolars were not completely developed (Figures 2-6).

**SURGICAL PROCEDURE**

**Extraction of Bilateral Maxillary Impacted Third Molar and Distomolars and Bilateral Mandibular Third Molar and Distomolars**

Ward’s incision with distal extension, extending to the maxillary tuberosity area and in the case of mandible the incision was extended distally up to the retromolar pad was given. After retracting the tissue, buccal, and distal bone around the impacted third molar and distomolar was removed using a straight fissure bur. After creating a purchase point in the root, it was extracted. Then, the follicle was removed, and the site was irrigated abundantly with normal saline. Afterward, the tissue was held in place and sutured, and pressure pack was given. Antibiotics and analgesics were prescribed postoperatively.

**DISCUSSION**

Distomolars are supernumerary tooth located distal to the third molar and are usually rudimentary. In general, these teeth are smaller in size than normal second and third molar and their general crown morphology is highly abnormal. The etiology of supernumerary teeth is not completely understood. Both environmental and genetic factors are considered responsible. Certain theories - such as atavism, dichotomy, dental lamina hyperactivity, traumatic local event, and genetic factors - are suggested as explanations for nonsyndromic supernumerary teeth.

Supernumerary teeth are categorized into four groups regarding their sites: Mesiodens, parapremolar, paramolar, and distomolar. Although single supernumerary teeth are more prevalent in anterior parts of the maxilla, in nonsyndromic cases, mandibular premolar region is mostly involved (45.29%). In these cases, supernumerary teeth are least common in the mandibular molar region (0.05%) and anterior parts of the mandible (0.04%).

![Figure 1: Preoperative orthopantomogram](image1)

![Figure 2: Extracted upper right third molar and distomolar](image2)

![Figure 3: Extracted upper left third molar and distomolar](image3)

![Figure 4: Extracted lower left third molar and distomolar](image4)
Atavism and dichotomy theories have been disapproved.\(^3,9\) Furthermore, since the trauma and associated scars were not seen in the patient’s history and examination, the traumatic local event was rejected. Some studies put emphasis on genetic factors. Hence, the history of the family was assessed carefully but no similar condition was found in the patient’s family. Therefore, according to history and examinations, dental lamina hyperactivity theory, which most studies support, was considered as the cause of this condition in the patient.

The reported case had six distomolars placed bilaterally in both jaws, which is less prevalent in nonsyndromic patients. One of the limitations of this study was that the patient could not follow-up for the extraction of bilateral maxillary second distomolar.

The management of supernumerary teeth is important, as the condition can cause esthetic and functional problems. In the presented case, the utmost effort was made to extract the teeth with minimal bone removal. In this surgery, the extraction of the third molar was undertaken before extracting the distomolar for proper visualization of distomolars.

The presence of impacted teeth may lead to orofacial pain, and in these conditions, the extraction of these teeth is indicated. Dull and diffuse orofacial pain extending to the temporomandibular and auricular area may be associated with impacted mandibular teeth. Therefore, the extraction of these impacted teeth may lead to the alleviation of the pain. In the presented case, the pain reduced 1-week after the surgery and in 1-month and 3-month follow-up intervals it showed uneventful healing.

**CONCLUSION**

Dentists must be aware of different types and condition of supernumerary teeth. An early diagnosis and proper treatment in every case of supernumerary teeth are essential factors for the prevention and confrontation of the potential complication they could cause.

**REFERENCES**