## Case Report / Olgu Sunumu

# Kissing molars: A rare case report

Kissing molarlar: Nadir bir vaka sunumu

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#### ABSTRACT

Kissing molar is a rare condition wherein the occlusal surfaces of the impacted mandibular molars are in close proximity with each other within a single follicular space, with their roots in the opposite direction. According to the existing dental literature, the occurrence of this phenomenon is extremely rare and its etiology remains unknown. Keywords: Mandibular, kissing molar, follicular space, impacted

#### ÖΖ

Kissing molar, gömülü mandibuler molarların oklüzal yüzeylerinin tek bir foliküler torba içerisinde birbirleriyle çok yakın oldukları ve köklerinin ters yönde olduğu nadir bir durumdur. Mevcut dental literatüre göre, bu fenomenin gelişmesi son derece nadirdir ve etiyolojisi bilinmemektedir.

Anahtar kelimeler: Mandibuler, kissing molar, foliküler torba, gömülü

## INTRODUCTION

Impaction refers to failure of the tooth in erupting out of the alveolar bone. The most commonly impacted permanent teeth are the third molars of mandibular and maxillary arches, followed by the maxillary canines, central incisors, second mandibular premolars, and occasionally second molars (0.03%–0.04% of all impacted teeth) (1). The term "kissing molar" or "rosette formation" was first described in 1973 and indicates impacted mandibular second and third molars with their occlusal surfaces contacting each other within a single follicular space and their roots in opposite directions (2). Although the same term can also be used to characterize similar conditions of impaction such as impacted first and second molars. In this case report, we present a case of a kissing molar between the mandibular second and third molars, which is rare phenomena (3).

## **CASE PRESENTATION**

A female patient aged 15 years reported to our Department of Oral Medicine and Radiology with the chief complaint of unevenly placed teeth in the upper and lower incisor regions since eruption. There were no relevant medical, drug, and family histories. The patient had a straight profile with competent lips. Intraorally, multiple decayed teeth were present; root stumps with respect to 45; and missing teeth with respect to 26 and 46 (Figure 1). Angle's Class I canine relation was noted bilaterally. According to the clinical findings, a working diagnosis of Angle's Class I malocclusion along with crowding with respect to 12, 13, 22, 23, 32, 33, 42, and 43 was arrived upon. Additional diagnoses of dentinal caries with respect to 16, 17, 27, 37, 45, and 47 and partially edentulous maxillary and mandibular arches with respect to 26 and 46 were made. Informed consent was obtained from the patient before the radiographic examination. A panoramic radiograph was made which revealed multiple decayed teeth, multiple missing teeth and one broken tooth with loss of crown structure in the lower right back tooth region. Mesioangular impacted lower third molar on the right side as well as impaction of second and third lower molars on the left side within a single follicular space was noted. The occlusal surfaces of the left impacted mandibular second and third molars were found to be contacting each other with their roots pointing in opposite directions. Based on this finding, a radiographic diagnosis of a kissing molar with respect to 37 and 38 was made (Figure 2). The patient was opined for the extraction of the retained root stump and disimpaction with respect to 38, scaling, restoration of decayed teeth, and orthodontic correction for irregularly placed teeth. The impacted 38 was surgically removed, and the patient is currently undergoing orthodontic correction (Figure 3).

## DISCUSSION

Impacted permanent molars have been extensively recorded, but the uniqueness of kissing molars or rosette formation is not widely reported in the dental literature. This condition may occur in isolation or in addition to other conditions (4). In 1991, Robinson first coined the term "kissing molars," but it was in 1973 that Van Hoof gave a detailed description of this Figure 1. Intraoral photograph showing a missing tooth with respect to 37



Figure 2. An orthopantogram showing kissing molars on the left side with respect to 37 and 38



Figure 3. A postoperative orthopantogram showing a missing tooth with respect to 38 after surgery



rare phenomenon (2, 5). In 2008, Juneja provided a more elaborate definition of kissing molars, long after its first description by Van Hoof. There are some controversies regarding the division criteria amidst the unusual impaction and rosetting of molars (6). It has been recommended that in the absence of any contact between the two impacted molars in the radiograph, they will be not classified as kissing molars (6). Although many factors that influence the disturbances in tooth position are suggested, the etiology of kissing molars remains unknown. However, in 1991, Nakamura et al. (7) advocated multiple rosetting of molar teeth in patients diagnosed with mucopolysaccharidoses and related disorders. The management recommended for impacted molars comprises removal of the overlying bone or the mucosa and luxation and removal of the unerupted molar (8). In the case presented here, the impacted 38 was surgically removed under local anesthesia and the patient is currently undergoing orthodontic treatment. The kissing molar was an incidental finding in the case presented here. The conservation of the impacted teeth can lead to difficulties such as mandibular fracture, resorption of the root of the adjacent teeth, and associated pathologies (9).

#### CONCLUSION

Kissing molars is considered as an asymptomatic dental abnormality, which has to be identified through routine radiographs for minimizing the associated complications. In the long course of time, impacted teeth can generate diverse complications. Therefore, routine radiographic investigation should be conducted in patients presenting with complaints of congenitally missing teeth to prevent any future complications such as malocclusion, space infections, cysts, and tumors.

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