

SIRADIŞI KISSİNG MOLARLAR: DÖRT OLGU RAPORU UNUSUAL CASES OF KISSING MOLARS: A REPORT OF FOUR CASES

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Özet

"Kissing molars" deyimini ilk kez 1973 yılında literatürde yayınlanmış ve bu zamana kadar sadece altı vaka rapor edilmiştir. "Kissing molars", gömülü daimi mandibular ikinci ve üçüncü molarların oklüzal yüzeylerinin kontakta olduğu, köklerinin ters yönde olduğu ve tek bir foliküler torba içinde olduğu durum olarak tanımlanmaktadır. "Kissing molars", çok nadir görülen bir durumdur ve "kissing molars" ile ilişkili çok sınırlı bilgiye ulaşılabilmektedir. Bu çalışmada dört hastada bulunan "kissing molars" olguları sunulmaktadır.

Anahtar Kelimeler: Gömülü molarlar, kissing molars, cerrahi çekim.

Abstract

Kissing molars were first published in 1973, and since then only six cases have been reported in the literature. Kissing molars were referred to contacting occlusal surfaces of the impacted permanent mandible second and third molars with one follicular space and their roots location in opposite directions. Kissing molars were very uncommon condition and very limited information was available regarding kissing molars. The present study describes four patients with kissing molars.

Key words: Impacted molars, kissing molars, surgical extraction.

Introduction

Kissing molars(KM) were very uncommon situation that were firstly defined by Van Hoof in 1973 and since then only 6 cases have been reported in the literature (1). It was referred to contacting occlusal surfaces of the impacted permanent mandible second and third molars with one follicular space and their roots location in opposite directions (2). The same follicular space could be determined radiologically, during the surgery and histopathologically (2-4). However, the term has also been used to define a similar appearance with other impacted molars (3-5). It was reported only two patients with three KM which has been impacted permanent third and fourth molars and the fourth molar was the second most common supernumerary tooth after the

mesiodens (3). Most of KM has been associated with impacted second and third molars.

The impaction of permanent teeth described as stopping of eruption of teeth due to physical barrier in the eruption path and abnormal position of the teeth. The eruption of permanent teeth are environmental and mostly genetically based and occur a complex series of events, it is not surprising that problems may arise. The impaction of permanent teeth commonly relate to the maxillary and mandible third molars, maxillary canines or central incisors, and mandible second premolars (6).

Cases Presentation

Case 1

A 24-year-old man without systemic disease was referred to the Department of Oral & Maxillofacial Surgery with dental care. A panoramic radiograph showed KM which impacted left mandible second and third molars, with one follicular space (Figure 1A). The patient's medical history was normally. Besides the mandibular second and third molars, his right mandibular and left maxillary third molars

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were impacted. The patient was informed about his impacted molars but he refused treatment.

Case 2

The second patient was 40 year-old man referred to our clinic with an insufficient prosthetic rehabilitation. During the routine panoramic radiologic examination, it was KM which impacted second and third molars in the left mandible side (Figure 1B). Clinically the case was asymptomatic. The patient was also informed about his impacted molars but he refused treatment.

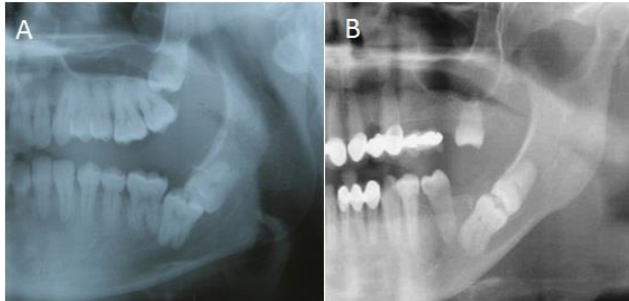


Figure 1 **A.** Panoramic radiograph showing impacted left second and third mandible molars with occlusal surfaces contacting each other in a single follicular space. **B.** Panoramic radiograph showing impacted left second and third mandible molars with occlusal surfaces contacting each other in a single follicular space.

Case 3

A 54 year-old healthy woman was referred to our clinic with a chief complaint of poor esthetics, oral discomfort, and compromised mastication resulting from a full upper and lower denture. The clinical and radiologic examination showed a narrow maxillary and mandible alveolar ridge with insufficient height and panoramic x-ray was fairly amazing. The panoramic radiograph showed the presence of unilateral right mandible impacted KM overlying mucosa was normally. Except for right mandible impacted second and third molars she was edentulous (Figure 2). She refused the treatment of impacted molars due to having no symptoms and for the possible risk of mandibular fracture.

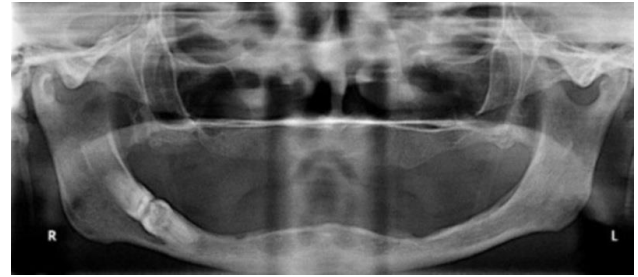


Figure 2. In edentulous patient, panoramic radiograph showing impacted right second and third mandible molars with occlusal surfaces contacting each other in a single follicular space.

Case 4

A healthy 23-year-old man referred to our Department of Oral and Maxillofacial Surgery with a complaint of a swelling and pain in the retromolar region. The patient had not been receiving any medication control. During a clinical intraoral examination showed 6 mm pocket distal to the lower right second molars. A panoramic radiograph showed an impacted mandible right third and fourth molars with a single follicular space (Figure 3A). Both these molars, together with the associated follicular tissue, were removed under local anaesthesia. Local anesthesia of the inferior alveolar nerve and terminal infiltration of buccal fold was performed and good anesthesia was achieved. The right mandibular third and fourth molars were extracted using a triangular vestibular flap that was limited to the second molar, lifting a full-thickness flap. After the third molar was sectioned into 2 parts, fragments and fourth molar were removed (Figure 3B). Follicular tissue underwent histopathologic analysis and it did not show any evidence of disease. The mucoperiosteal flap was closed 3,0 silk suture. After surgical procedure, local cold compresses were applied to the right mandible on and off for 3 hours. In the postoperative period, a nonsteroidal anti-inflammatory drug three times a day, mouthwashes with chlorhexidine 0,2% three times a day and amoxicillin 1 g twice a day for 5 days were prescribed. After surgery for 7th day sutures were removed and the patient complained no pain. It was shown that neither paresthesia nor anesthesia in the region of the chin and no sign of infection.

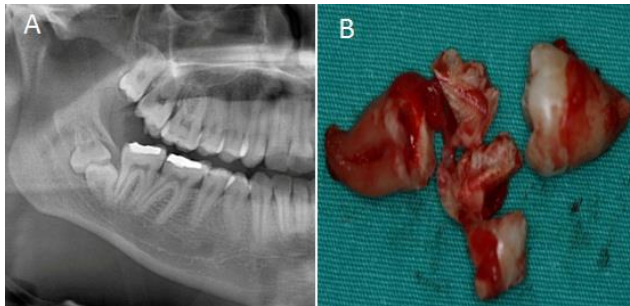


Figure 3 **A.** Panoramic radiograph showing impacted right third and fourth mandible molars with occlusal surfaces contacting each other in a single follicular space. **B.** Extracted kissing molars.

Discussion

The etiology of impaction is related to various local and systemic factors which affect physiological mandible growth and tooth development. Presence of a supernumerary teeth, odontogenic and non-odontogenic lesions, deficient arch length, premature loss of primary teeth, or retained primary teeth consist of locally factors. Cleidocranial dysostosis, Down's syndrome, hypothyroidism and hypopituitarism were considered as possible systemic factors (7,8).

Impacted molars cause several clinical complications such as; cyst, abscess or other pathology, pericoronitis, periodontitis, caries and root resorptions but they are usually asymptomatic situation and commonly patients are unaware of this condition (9). Therefore, impaction teeth are generally realized routine ortopantomographic radiographs and that leads to delayed diagnosis.

In the literature, one of the study reported that 170 case series of patient with 200 impacted first and second permanent molars and found that 137 patients (%68.5) were asymptomatic (9). Three of our cases were asymptomatic and noticed during routine examination. Hence OPG should be taken from every oral surgery patients (1).

Preoperative assessment is extremely important and various factors can affect the extraction of impacted third molars such as the patient's age and tolerance, the depth of tooth, position of the tooth, angulations and form of the roots, number of roots, proximity to mandible canal, relationship of the tooth to the ramus, pathological conditions (10,11). Therefore these factors are being assessed to

decide whether extraction of impacted molars surgically removed, orthodontically treated, or simply followed up regularly (9). In addition, it is essential that clinicians should state to patients of dangers and benefits of the required procedures, specifically surgical complications such as possible damage to the inferior alveolar nerve and mandible fracture (12). We have also informed one of the patients who has KM about the possible mandible fracture risk and she refused to be treated.

All cases were analyzed with regard to following parameters: age, gender, location, associated teeth, radiological features, clinical signs, treatment and general conditions in Table 1.

	Sex	Age	Region	Impacted molars	Dentulous or Edentulous	Clinical Signs	Local or general anesthesia	Surgery	Another impacted teeth	General condition
Van Hoof RF	M	31	bilateral	2,3	Edentulous	None	None	None	12,13	Mentally Retarded
Robinson JA et al.	M	25	bilateral	2,3	Dented	None	None	None	28	None
Bakaeen G, Baqain ZH	M	23	bilateral	3,4	Dented	Yes	General anesthesia	Yes	18,28	-
B. Krishnan	F	36	Left lower side	2,3	Dented	Yes	Local anesthesia	Yes	None	None
Boffano F, Gallesio C.	M	42	Right lower side	3,4	Dented	Yes	Local anesthesia	Yes	18,28	-
Present case 1	M	24	Left lower side	2,3	Dented	None	None	None	28, 48	None
Present case 2	M	40	Left lower side	2,3	Dented	None	None	None	None	None
Present case 3	F	54	Right lower side	2,3	Edentulous	None	None	None	None	None
Present case 4	M	23	Right lower side	3,4	Dented	Yes	Local anesthesia	Yes	18,28,38, 39	None

Abbreviations: M (male), F (female)

Table 1. Previously reported and our cases with kissing molars in the literature.

Because the all published reports were based on single case reports and this study was firstly based on four case reports, we could not compare our results with the literature statistically. Unluckily, it is difficult to offer clinical procedure since it was very uncommon findings.

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