

原文題目(出處)：	Extremely Rare Form of Impaction Bilateral Kissing Molars: Report of a Case and Review of the Literature
原文作者姓名：	Tamer Zerener, Gurkan Rasit Bayar, Hasan Ayberk Altug, and Serkan Kiran
通訊作者學校：	Gulhane Military Medical Academy, Department of Oral and Maxillofacial Surgery, 06010 Ankara, Turkey
報告者姓名(組別)：	鄭凱駿 (intern L 組)
報告日期：	2016/07/11

內文：

## Introduction

- The permanent teeth can be affected by eruption problems.
  - No.1: mandibular and maxillary third molars
  - No.2: maxillary canines
  - No.3: central incisors,
  - No.4: mandibular and maxillary second premolars
  - No.5: second molars (rarely, about 0.03–0.04% of all impacted teeth)
- Kissing molars (KMs) or rosette formation is an extremely rare condition of impacted molars contacting occlusal surfaces in a single follicular space and their roots pointing in opposite directions. It consists exactly in a full impacted of permanent molars which occurs only in the lower jaw.
- Van Hoofer presented the first description of this dental pathological condition in 1973, Robinson et al. coined the specific term “kissing molars” in 1991.
- In some cases kissing molars can be seen, but occurrence of bilateral kissing molars is extremely rare phenomenon in the dental literature and the etiology of this phenomenon is still unknown. At the present time, about thirty cases have been reported in the scientific literature

## Case Report

- A 38-year-old female patient complained of swelling at the right lower side of the angulus of mandible. / Medically, without any previously known allergic reaction, and she was not taking any medication.
- Intraoral examination:**  
Expansion of buccal cortical plate and a palpable soft swelling over the residual alveolar ridge bone in the second and third molars region of lower mandible.



### 3. X-ray finding:

- (1) Bilateral impaction of the lower second and third molars in each side of the angulus region of the mandible.
- (2) In each side of the mandible, the impacted teeth (the second and third molars) had their occlusal surfaces contacting each other in a single follicular space.



4. **Treatment plan:** Surgical removal of the kissing molars.

### 5. Surgical Operation:

- (1) Medicated preoperatively with 40 mg prednisolone for controlling the postoperative complications.
- (2) Regional and infiltration anesthesia blocking the inferior alveolar, buccal, and lingual nerves.
- (3) The kissing molars were approached with the help of a vestibular incision.
- (4) Mucoperiosteal flap was removed.
- (5) Then, osteotomy was performed to expose the impacted kissing molars.
- (6) Sectioning of the third molar with surgical burs to minimize the quantity of bone removal and facilitate the extraction.

- (7) After removal of the third molar, second molar was removed by the same approach.
- (8) Following removal of kissing molars, the socket was rinsed with saline solution and residual follicular tissue was removed



- (9) Finally, the operational region was sutured by interrupted stitches using 3/0 silk suture.
- (10) After 3 months from the first operation, the same surgical intervention procedure was performed to the other side of the mandible



- (11) Following the surgical operations, for controlling postoperative pain and infection, 1000 mg amoxicillin and 550 mg naproxen sodium were prescribed to the patient for a week.
- (12) Swelling decreased gradually in the follow-up period after surgery. The sutures were removed seven days after the operations. The patient was kept on a soft diet for about two months. After that, recovery period was uneventful.



## Discussion

1. Kissing molars:
  - (1) A form of impaction that is very rarely reported in dental literature.
  - (2) The term of kissing molars or rosette formation was first described in 1973.
  - (3) It refers to mandibular second and third molars which have occlusal surfaces containing each other in an enlarged single follicular space and roots pointing in opposite directions.
  - (4) The distinction between unusual impaction and kissing molars is unclear and the etiology of this phenomenon remains to be unknown
2. Mucopolysaccharidosis (MPS):
  - (1) Bilateral kissing molars may be related to mucopolysaccharidosis (MPS). However, it has not been cleared yet.
  - (2) It is a group of inherited metabolic disorders and an enzyme abnormality accumulation of mucopolysaccharides in different tissues of the body.
  - (3) Cawson reported a patient affected with MPS and suggested that MPS could be a possible etiological factor for occurrence of kissing molars.
  - (4) Also, Nakamura et al. reported Bilateral kissing molars in their 2 out of 4 patients with MPS.

3. The decision for extraction of asymptomatic kissing molars represents surgical dilemma.
  - ◎Complications of extraction:
    - Mandibular fractures during the surgery or postoperatively
    - Damage to the inferior alveolar nerve (0.5 to 5%) and lingual nerve (0.2 to 2%)
    - Dry socket
    - Osteomyelitis
    - TMJ disorders
  - ◎Complications of maintenance of kissing molars:
    - Pericoronitis
    - Local pain
    - Cystic changes
    - Root resorption of adjacent teeth.
4. Panoramic radiography is considered as the gold standard in most cases. CT scans must be used for evaluation of proximity of inferior alveolar nerve channel. Utmost care must be taken to avoid lingual nerve injury.
5. Kissing molars can be seen in unilateral or bilateral forms. However, most of them are in unilateral form.

TABLE 1: Cases reported as bilateral kissing molars in the English dental literature.

Author/year	Sex/age	Symptom	Radiographic presentation	Medical problems	Treatment	Postop	Histopathology
van Hoof 1973 [3]	Male 31	None	Bilateral Mandibular Impaction	Intellectually challenged	Maintained	—	—
Robinson et al. 1991 [15]	Male 25	None	Bilateral Mandibular Impaction	None	Maintained	—	—
Nakamura et al. 1992 [11]	Male 25	None	Bilateral rosette formation in both jaws	MPS	Maintained	—	—
Nakamura et al. 1992 [11]	Male 17	None	Bilateral rosette formation in both jaws	MPS	Maintained	—	—
Nakamura et al. 1992 [11]	Male 21	None	Bilateral rosette formation in both jaws	None	Maintained	—	—
Bakaeen and Baqain 2005 [16]	Male 23	Facial pain	Bilateral Mandibular Impaction	None	Surgical removal under GA	Trismus and dry socket	—
Sa Fartes et al. 2014 [17]	Male 33	None	Bilateral Mandibular Impaction	None	Surgical removal under LA	—	Dentigerous cyst
Kiran et al. 2014 [18]	Female 18	None	Bilateral Mandibular Impaction	None	Surgical removal under GA	—	—
Present case 2015	Female 38	Swelling over the right lower side of the face	Bilateral Mandibular Impaction	None	Surgical removal under LA	—	—

MPS: mucopolysaccharidosis, GA: general anesthesia, and LA: local anesthesia.

Author/year	Sex/age	Symptom
van Hoof 1973 [3]	Male 31	None
Robinson et al. 1991 [15]	Male 25	None
Nakamura et al. 1992 [11]	Male 25	None
Nakamura et al. 1992 [11]	Male 17	None
Nakamura et al. 1992 [11]	Male 21	None
Bakaeen and Baqain 2005 [16]	Male 23	Facial pain
Sa Fartes et al. 2014 [17]	Male 33	None
Kiran et al. 2014 [18]	Female 18	None
Present case 2015	Female 38	Swelling over the right lower side of the face

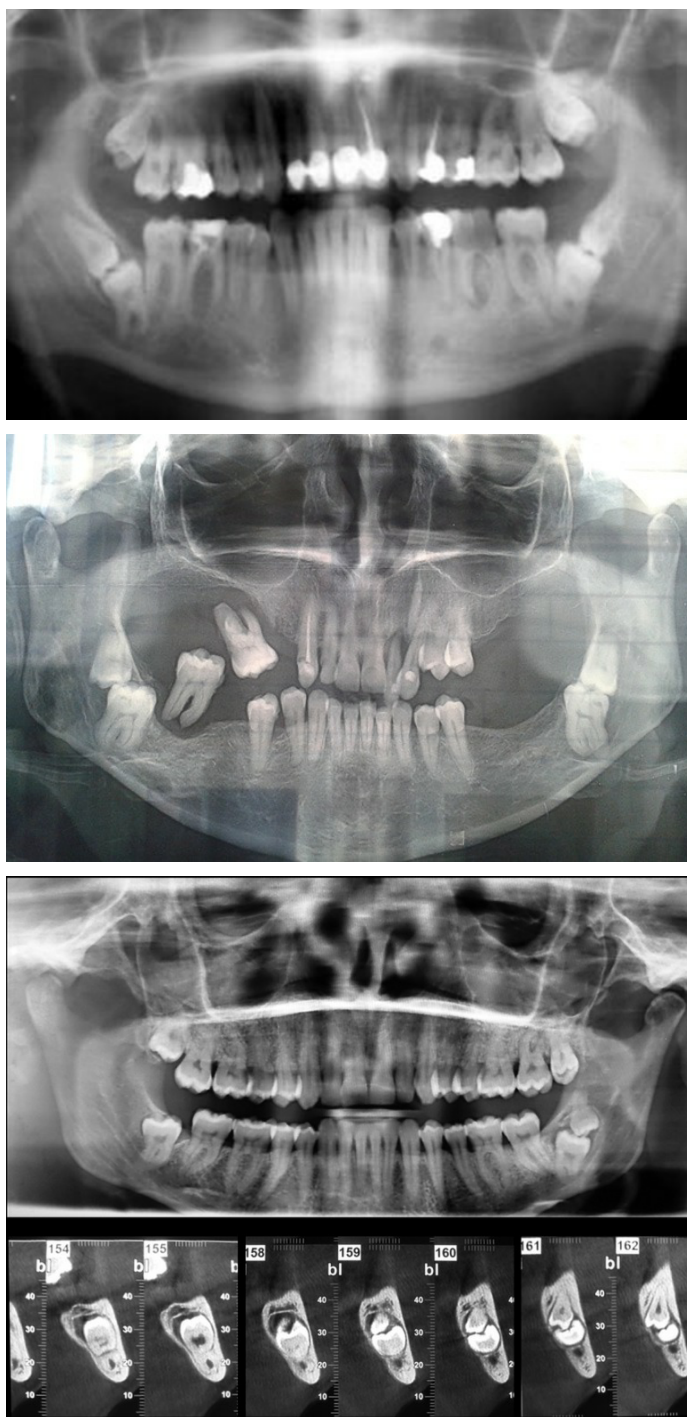
Radiographic presentation	Medical problems
Bilateral Mandibular Impaction	Intellectually challenged
Bilateral Mandibular Impaction	None
Bilateral rosette formation in both jaws	MPS
Bilateral rosette formation in both jaws	MPS
Bilateral rosette formation in both jaws	None
Bilateral Mandibular Impaction	None
Bilateral Mandibular Impaction	None
Bilateral Mandibular Impaction	None
Bilateral Mandibular Impaction	None

Medical problems	Treatment	Postop	Histopathology
Intellectually challenged	Maintained	—	—
None	Maintained	—	—
MPS	Maintained	—	—
MPS	Maintained	—	—
None	Maintained	—	—
None	Surgical removal under GA	Trismus and dry socket	—
None	Surgical removal under LA	—	Dentigerous cyst
None	Surgical removal under GA	—	—
None	Surgical removal under LA	—	—

## Conclusion

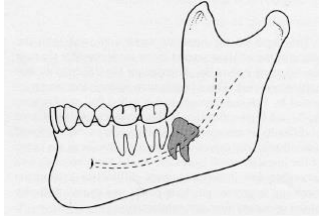
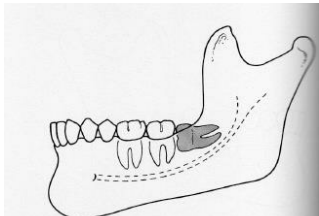
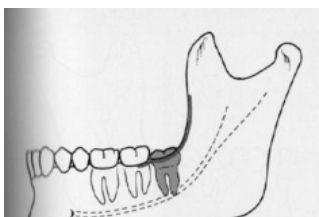
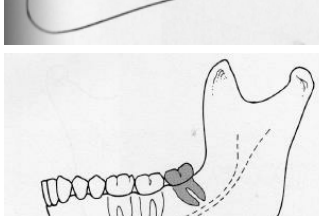
1. The phenomenon of this issue has not been well described yet. Few treatment options were described in the literature.
2. This phenomenon can be sign of various medical conditions that may require further investigation.

延伸:



題號	題目
1	下列各圖中，何者在「Pell and Gregory classification」的分類裡面，屬於「class II position B」的埋伏齒情形？



	<p>(A) </p> <p>(B) </p> <p>(C) </p> <p>(D) </p>
<p>答案 (B)</p>	<p>出處： Contemporary Oral and Maxillofacial Surgery, Sixth Edition / p.150-153</p>
<p>題號</p>	<p>題目</p>
<p>2</p>	<p>下列關於拔除阻生齒的敘述，何者有誤</p> <p>(A) 在下顎骨還未完全發育完成前發現有阻生齒的情形，應盡早拔除阻生齒，以防後患。</p> <p>(B) 若在同一台手術中需拔除上顎及下顎的阻生齒，通常優先拔除上顎，再拔下顎</p> <p>(C) 拔除阻生齒的術後併發症包括，嘴唇麻痺、疼痛、腫脹、瘀血、傷口感染、皮下氣腫...等。</p> <p>(D) 再拔除智齒的術後飲食方面，在術後數天內要切記不要用吸管進食，並以軟、冷食物為宜，多喝水。</p>
<p>答案 (A)</p>	<p>出處： Contemporary Oral and Maxillofacial Surgery, Sixth Edition / p.169-171</p>