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A case of mirror image impacted rosette molars

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Abstract

Kissing molars (KM) or rosette formation is a term that is used to describe impacted teeth contacting occlusal surfaces in a single follicular space and their roots pointing in opposite directions. Etiology of this phenomenon is still unknown. It is a very rare form of inclusion defined as molars included in the same quadrant, with occlusal surfaces contacting each other. Surgical removal is the option of treatment. Here by we present a report of such type of rosette molars.

Keywords: Impacted molar, kissing molar, rosette molar, surgical extraction

Introduction

The permanent teeth can be affected by eruption problems. The most affected ones are the mandibular and maxillary third molars, maxillary canines, central incisors, second mandibular and maxillary premolars, and rarely second molars (0.03–0.04% of all impacted teeth), respectively ^[1]. Kissing molars (KM) or rosette formation is a term that is used to describe impacted teeth contacting occlusal surfaces in a single follicular space and their roots pointing in opposite directions ^[2]. The condition of impaction type of teeth was described first by van Hoof in 1973 ^[3]. 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 ^[4,5]. In this paper, we report a case with this phenomenon.

Case Report

A 26-year-old male reported to the Department of Oral and Maxillofacial Surgery for improvement in facial profile and correction of deranged teeth. An OPG and Lateral Cephalogram was advised for orthodontia treatment. (Figure 1 & 2) His past medical history was unremarkable and he had undergone extraction of carious teeth. OPG Examination revealed bilateral impacted mandibular third molars and on left side mandibular second molar was impacted in a rosette formation with the mandibular third molar. The roots of mandibular second molars were almost approaching the lower border of mandible. (Figure 1) Orthodontia was started and removal of bilateral impacted teeth were planned under general anesthesia. Under GA intraoral flap was reflected and prophylactically a 6-hole plate was fixed to avoid a displacement of fracture segments if in case it happens. After removal of teeth the bones were in contact in lingual cortex so plate was removed. Absorbable sutures were placed. (Figure 3) In this case, it is likely that the derangement of teeth led to apposition of second and third molars. This resulted in the third molar occlusal surface coming in contact with that of the second molar.

Discussion

KM or multiple resetting of molars has been associated with pathological conditions such as Mucopolysaccharidoses and cleidocranial dysplasia. Both are developmental conditions that are detected in young patients with stigmata of the syndromes, serving presence of these anomalies as an indicator to perform further investigations. Mucopolysaccharidosis type VI (Maroteaux- Lamy syndrome) is a disorder resulting from a genetic defect in the degradation of dermatan-sulphate, which accumulates in different tissues and results in gingival hyperplasia, malocclusion, prolonged retention of the primary dentition, and condylar defects. Cleidocranial dysplasia is an autosomal dominant inherited disease that results in a short

stature, absence of clavicles, micrognathia, and delayed eruption of permanent dentition. To this extent, the possibility of metabolic disease involvement in patients can be easily ruled out by relevant clinical and histological analyses [6]. The impaction of a tooth may cause to various pathologies including cysts, tumors, infection and deep caries of impacted or adjacent teeth. Such pathologies require surgical extraction of the related tooth with the help of CBCT examination [7]. Dentigerous cysts are the most encountered type of cysts associated with impacted molars, and can results in several tumors, such as, ameloblastoma, squamous cell carcinoma and muco-epidermoid carcinoma. Owing to risk of the

occurrence these kind of pathologies, histopathological assessment is advised [8]. However, a surgical extraction should not be applied for each cases with regard to symptoms of the patient. On asymptomatic patients, systemic problems, age, size of cyst, relationship with peripheral structures and chance of orthodontic treatment applications must be considered. he great interest in the kissing molar occurrence should be its rarity since the condition may not bring further problems and the prognosis for most histopathological diagnosed dentigerous cysts is excellent, with recurrence being an uncommon finding.

Table 1: Patients data in previous reports in the literature [6].

Authors/Year	Age	Gender	Molar impaction	Symptoms and associated signs	Treatment	Postoperative complications
Van Hoof RF [1]	31	M	2'8'3' Bilateral	Not available	Not available	Not available
Robinson JA et al. [2]	25	M	2'8'3' Bilateral	Not available	Not available	Not available
McIntyre G [3]	19	F	2'8'3' Left	Pericoronitis	Extraction under GA	Trismus, dry socket, bone sequestrum
Manani A [4]	38	M	2'8'3' Left	Not available	Conservative	Not available
Bakaeen G, Baqain ZH [5]	23	M	3'8'4' Bilateral	Pain	Extraction under GA	Not available
Krishnan B [6]	36	F	2'8'3' Left	Intra/ extraoral swelling Dentigerous cyst	Extraction under LRA	Uneventful
Boffano P., Galesio C [7]	42	M	3'8'4' Right	Not available	Extraction under LRA	Uneventful
Gulses A et al. [8]	26	F	2'8'3'	Uneventful	Extraction	Uneventful
Gulses A et al. [8]	32	F	2'8'3'	Dentigerous cyst	Extraction	Uneventful
Gulses A et al. [8]	44	M	3'8'4'	Uneventful	Extraction	Uneventful
Gulses A et al. [8]	23	M	2'8'3'	Follicle granulomatous changes	Extraction	Paraesthesia IDN (4 months)
Gulses A et al. [8]	16	M	1'8'2'	Dentigerous cyst	Extraction	Paraesthesia IDN (6 months)
Gulses A et al. [8]	37	F	2'8'3'	Uneventful	Extraction	Uneventful
Gulses A et al. [8]	22	F	2'8'3'	Follicle granulomatous changes	Extraction	Uneventful
Gulses A et al. [8]	27	M	3'8'4'	Dentigerous cyst	Extraction	Paraesthesia IDN (3 months)
Gulses A et al. [8]	20	F	2'8'3'	Uneventful	Extraction	Uneventful
Sa Fortes RZ [9]	33	M	2'8'3' Bilateral	Bilateral dentigerous cysts	Extraction under LRA	Uneventful
Kiran HY [10]	18	F	2'8'3' Bilateral	Face swelling	Extraction under GA	Uneventful
Anish N [11]	35	M	2'8'3' Bilateral	Uneventful	Not available	Not available



Fig 1: OPG



Fig 2: Lateral Cephalogram



Fig 3: Surgically removed teeth.

Conclusion

In dental practice, clinicians encounter various types of impaction of teeth. Kissing molars is another impaction type of teeth. However, the phenomenon of this issue has not been well described yet. Few treatment options were described in the literature. This phenomenon can be sign of various medical conditions that may require further investigation. The surgical approach for this condition requires an exhaustive understanding of the anatomy of the region, advanced surgical abilities, and a rigorous planning process. Little scientific knowledge has been gained in relation to this pathology, and a greater number of publications are needed on this topic.

References

1. Stefano S, Michela R, Paolo B, *et al.* Chapter11: uprighting of the impacted second mandibular molar with skeletal anchorage, in *Orthodontics Basic Aspects and Clinical Considerations*, F. Bourzgui, Ed, 2012, 247-264.
2. Yadavalli G, Singh CD. Kissing molars - a rare entity. *Journal of Pharmaceutical and Biomedical Sciences*. 2013; 3:1245-1246.
3. Van Hoof RF. Four kissing molars, *Oral Surgery, Oral Medicine, Oral Pathology*. 1973; 35(2):284.
4. Bakaeen G, Baqain ZH. Interesting case: kissing molars. *British Journal of Oral and Maxillofacial Surgery*. 2005; 43(6):534.
5. Adrian Robinson J, Gaffney Jr W., Soni NN. Bilateral 'kissing' molars, *Oral Surgery, Oral Medicine, Oral Pathology*. 1991; 72(6):760.
6. Gonzalez-Perez LM, Infante-Cossio P, Sanchez-Sanchez M, Valdiviesodel-Pueblo C, Robles-Garcia M. Kissing Molars: A Report of Three Cases and Literature Review. *Int J Oral Dent Health*. 2015; 1:012. Received: July 17, Accepted: August 04, 2015.
7. Nedjat-Shokouhi B, Webb R. Bilateral kissing molars involving a dentigerous cyst: report of a case and discussion of terminology. *Oral Surg*. 2014; 7(S1):107-110.
8. Boffano P, Gallesio C. Kissing molars. *J Cranio Surg*. 2009; 20(4):1269-1270.