



## Sürmemiş İkinci Büyük Azı Dişin Alt Çene Ramus Bölgesine Migrasyonu

### Migration of an Unerupted Second Molar Tooth to the Ascending Mandibular Ramus

İkinci Büyük Azı Dişin Migrasyonu / Migration of an Unerupted Second Molar Tooth

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#### Özet

Gömülü dişlerin kemik içi migrasyonu, alt çenede sürekli dişlerde seyrek görülen gelişimsel bir dental anomali ve bu dişler genellikle üçüncü büyük azı dişleridir. Bu vakada, literatür taramamızda üçüncü olgu olduğunu belirlediğimiz ikinci molar dişin mandibular ramusa migrasyonu sunulmuştur. 32 yaşında dişeti tedavisi için başvuran erkek hastanın yapılan radyolojik incelemesinde sürmemiş ikinci molar diş, sol mandibular ramusun coronoid proçesinde görülmüştür. Hastanın dişin çekimini istememesi sebebiyle, periyodik radyografik tetkiklerle takibi yapılacaktır. Sürmemiş dişlerin radyografi ile erken teşhisi ve zamanında çekimi bu şekilde oluşan migrasyonları önleyecektir. Bu nadir migrasyonların teşhisinde panoramik radyografilerin kullanımı şarttır ve önemle tavsiye edilmektedir. Bu vaka, radyografik tetkikin ne kadar önemli olduğunu ortaya koymuştur.

#### Anahtar Kelimeler

Migrasyon, Gömülü Diş, Koronoid Proçes.

#### Abstract

Intrabony migration of impacted teeth is a rare developmental dental anomaly that occurs only in the permanent dentition of the lower jaw. A case report of migration of a second molar tooth to the ascending mandibular ramus is presented. A panoramic radiograph of a 32-year-old male revealed an unerupted second molar below the coronoid process on the left mandibular ramus. Since the patient refused to have the tooth removed, periodic radiographic observation will be conducted. Early detection by radiographic survey, along with timely removal of the unerupted tooth could prevent the development of such migration.

#### Keywords

Migration, Unerupted Tooth, Coronoid Process.

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Intraosseous migration of nonerupting teeth was an unknown natural phenomenon until the introduction of diagnostic roentgenography in the 1920s. Since then, clinicians have presented case reports of migrated, impacted teeth which involve generally the mandibular lateral incisors, the canines and the second premolars [1-3].

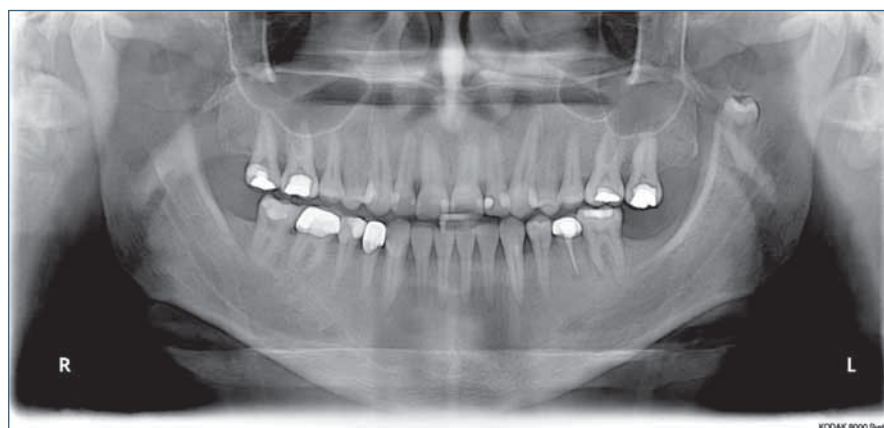
Intraosseous migration of impacted teeth is a rare developmental dental anomaly, which occurs only in the permanent dentition of the lower jaw. The mechanism

that causes migration of a tooth still remains obscure. There has been only few case reports in which ectopic molars are reported to be located in the condyle or subcondylar regions, and these are usually inverted third molars associated with lesions or tumors causing tooth dislocation [4-7]. Our literature review showed only two cases of mandibular second molar migration to the ascending mandibular ramus [3, 8]. This report represents a rare case of migration of a mandibular second molar tooth to the ascending mandibular ramus.

### Case report

A 32-year-old man referred to Gülhane Military Medical Academy, Department of Periodontology for treatment of his gingival problems. In intraoral evaluation, it was observed that the mandibular left second molar was missing and periodontal pockets ( $\geq 5\text{mm}$ ) and gingival hemorrhage were also detected. A panoramic radiograph was taken and showed migration of an unerupted second molar to the ascending mandibular ramus on the left site, below the coronoid process and the absence of both upper and lower third molars was also determined (Figure 1). The patient remembered that the mandibular left second molar and all third molars had never erupted. The ectopic second molar was significantly rotated up to  $90^\circ$ , and the root development of tooth was complete. The impacted tooth was asymptomatic. The patient had no systemic disorders and past medical history was unremarkable. The records indicated that a panoramic radiograph was taken eight years ago (Figure 2) and patient stated that he was not informed about the presence of ectopic tooth. When two radiographs were compared, it was noticed that its location was similar; however, the root development was incomplete in the former radiograph. The last ra-

diograph showed a stable radiolucent area surrounding the crown, suggestive of expanded pericoronal follicle. Ectopic tooth extraction was recommended; however, the patient refused to have it removed. Periodic radiographic observation was proposed and periodontal treatment was planned.



**Figure 1.** Panoramic radiograph showing the unerupted second molar with complete root development below the coronoid process on the left mandibular ramus.



**Figure 2.** Eight years ago, the panoramic radiograph shows the unerupted second molar with incomplete root development below the coronoid process on the left mandibular ramus.

## Discussion

Little is known about the etiology of intraosseous migration of nonerupting teeth. Some reports suggest that canine migration is congenitally inherited, although generally the migration mechanism and pathogenesis remains unresolved [2].

Silva et al. reported an unerupted second molar in mandibular ramus that migrated to the condyle over four years [3]. Jasmin et al. showed a similar case [8]. Such a migration is slow and occurs over a period of several years [1]. Also in our case, its initial movement began probably in an inferior position. It may continue its intraosseous migration until reaching its final location in the ascending mandibular ramus, below the coronoid process.

Indications for extracting the unerupted and migrated teeth are neuralgic symptoms or cyst formation. In spe-

cific cases where no symptoms are present, a conservative approach without treatment and with periodic radiographic follow up should be considered [1]. Since there were no symptoms and complaints, the patient refused extraction. Therefore, we decided to follow him with the panoramic radiographs.

Early detection of such a condition by a radiographic survey, along with timely removal of the unerupted teeth would prevent the development of such migrations. The use of a panoramic radiograph is imperative and is recommended for discovering such rare migrations and this case reveals how important radiographic observation can be.

In conclusion, more research should be carried out on genetic causes as one of the etiologic factors of intraosseous migration of nonerupting teeth.

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