

# Bilateral Mandibular Torus and an Ankylosed Third Molar: A Case Report

## Çift Taraflı Mandibüler Torus ile Birlikte Görülen Ankiloze Üçüncü Molar Diş: Bir Olgu Sunumu

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### Abstract

Environmental factors, genetic heritage, increased biting function and nutrition are some of the reason for intraoral exostosis to get developed. Torus mandibularis is one of the types of exostosis in the oral region, which is unilaterally or bilaterally located in the lingual aspect of the body of the mandible above the mylohyoid line. There is usually no need for biopsy for the diagnosis of tori. In symptomatic cases, excision is the treatment of choice. In this paper, a 65-year-old man with a wide bilateral mandibular torus and an ankylosed mandibular right third molar tooth with mucosal retention is presented and general information was given about tori. In relation with this case, it was thought that dental ankylosis and tori may occur together because of similar etiological factors.

### Öz

Çevresel faktörler, genetik miras, artmış ısırma kuvveti ve beslenme, intraoral ekzositoz oluşumuna neden olan faktörlerden bazılarıdır. Torus mandibularis oral bölgede, mandibulanın lingual yüzeyinde mylohyoid kas çizgisinin üstünde, unilateral ya da bilateral olarak ortaya çıkan ekzositoz tiplerinden biridir. Torusların tanısı için genellikle biyopsiye gerek yoktur. Semptomatik olgularda ise eksizyon gerekir. Bu olgu sunumunda, 65 yaşında erkek hastada çift taraflı geniş mandibular torus ve yarı gömülü mukoza retansiyonlu, ankiloze sağ üçüncü mandibular molar diş varlığı ve toruslar hakkında genel bilgi verilmiştir. Bu olguyla ilişkili olarak torusların ve ankiloze dişlerin benzer etiyolojik faktörler nedeniyle birlikte oluşabileceği düşünülmüştür.

### Keywords

Ankylosis, exostosis, torus mandibularis

### Anahtar Kelimeler

Ankiloz, ekzositoz, torus mandibularis

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### Introduction

Torus mandibularis is one of the types of exostosis in the oral region, which is unilaterally or bilaterally located in the lingual aspect of the body of the mandible above the mylohyoid line. The prevalence of tori has been estimated from 12.3% to 26.9% with an average age of onset typically in the fourth decade of life, and an increased prevalence in males. Although tori are known as an idiopathic condition, genetic and environmental factors, masticatory stress, and nutrition are the

precursor factors for the occurrence of the lesion (1-5). The volume of torus mandibularis may vary but particularly the big ones are inspected clinically. Its shape also varies from flat form to lobular form. The big ones are diagnosed easily and there is no need for biopsy for identifying the lesion. It is formed due to increased osteoblast activity. It suggests an anatomical variation and is not considered as a pathological situation. On radiographs, detection of torus mandibularis depends on its appearance together with its location. It seems as a radiopaque mass superimposed on the roots of canine, premolar and molar teeth which are generally asymptomatic. Removal of torus mandibularis may be indicated before prosthetic rehabilitation or when complication develops due to chronic trauma. In symptomatic cases, excision is treatment of choice (1-6). In this report, we aimed to present the case of torus mandibularis and an ankylosed mandibular right third molar tooth with mucosal retention in a 65-year-old male patient as well as current approaches and a review of the literature in terms of the relationship between torus mandibularis and ankylosis.

### Case Report

A 65-year-old male patient was referred to our clinic with the main complaint of halitosis and pain on his right mandibular molar region. There were no systemic problems in his history. However, he had parafunctional habits such as teeth grinding and clenching when he was asleep. On his extraoral examination, there were lymphadenopathy and mild swelling in the right molar area. His intraoral examination and periapical radiograph of the suspected area revealed pericoronitis sourced by mucosal retention of the tooth #48 which had also ankylosis (Figure 1) and bilateral torus mandibularis in big size (Figure 2). On the radiograph, root boundaries of ankylosed tooth #48 were not observed and lamina dura was absent. In addition to pericoronitis, he had also big sized torus mandibularis bilaterally. On clinical examination, sessile nodules were noted on the lingual surface with normal overlying mucosa. After a careful investigation, no medical or surgical treatment was performed for the torus mandibularis. The infected tooth was extracted attentively because of the ankylosis under local anesthesia. The patient's follow-up was uneventful.

### Discussion

Although the etiology of torus mandibularis is not known precisely, genetic and environmental factors are considered as the main reasons of the condition (1,4). Eggen and Natvig (6) found a relationship between the presence of tori and the number of teeth present in the mouth. In addition, adolescents with mandibular tori had fewer unerupted canines than those who did not have any torus. Furthermore, in another study, Eggen found a relationship between the presence of torus mandibularis and marginal alveolar bone height (5).

In our case, we have detected big sized bilateral torus mandibularis and ankylosed tooth #48 in a very closed relation. To date, there is no study regarding the association between torus mandibularis and dental ankylosis. Tooth-bone interface is an area where periodontal ligament (PDL) lies and keep the teeth withstand mechanical stress (7). In crown development, the region between alveolar bone and tooth germ allows the PDL development (8). When

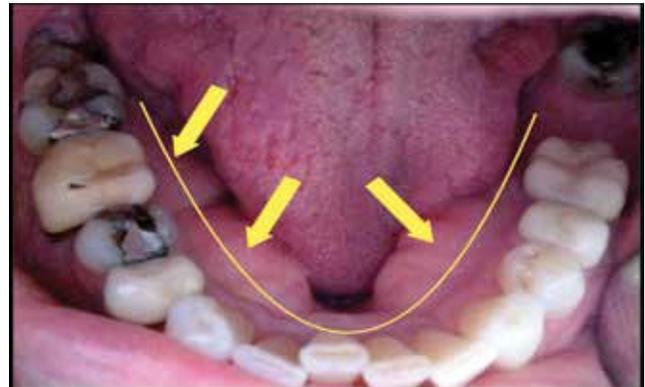


Figure 1. Ankylosed third molar roots

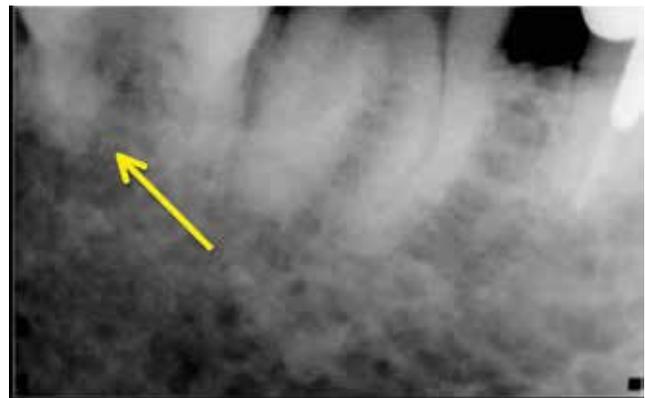


Figure 2. Intraoral aspect of the patient

this area is affected by a different condition, the teeth can interact with the tooth leading to ankylosis (9). Mineralization must not lie in this interface for interfering the development of ankylosis. Trauma, reimplantation of an avulsed tooth, orthodontic movements, and external resorption can also cause ankylosis. Alike ankylosis, torus mandibularis come into existence with similar etiological factors. Masticatory stress is considered as underlying factor for its formation as seen in the circumstance of ankylosis (10).

### Conclusion

Due to similar etiological factors, torus mandibularis and ankylosis may be considered to originate from the same origin. Further research is needed to address this issue.

### Ethics

Peer-review: External and Internal peer-reviewed.

### Authorship Contributions

Surgical and Medical Practices: Hasan Onur Şimşek, Mehmet Çavuşoğlu, Concept: Hasan Onur Şimşek, Gökhan Özkan, Design: Hasan Onur Şimşek, Gökhan Özkan, Data Collection or Processing: Gökhan Özkan, Mehmet Çavuşoğlu, Analysis or Interpretation: Hasan Onur Şimşek, Gökhan Özkan, Literature Search: Hasan Onur Şimşek, Gökhan Özkan, Writing: Hasan Onur Şimşek, Gökhan Özkan.

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