

# Large Torus Mandibularis Causing Difficulty in Mastication - A Case Report

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## Abstract

Torus Mandibularis or exostosis is common benign osseous lesions of the jaws. The etiology of torus mandibularis may be due to several factors, including genetics, masticatory stress and environmental factors. TM is usually asymptomatic however sign and symptoms depend on the site of location. Surgical excision is the treatment of choice. Here we present a case of large mandibular tori in 30 year old male patient having complaint of difficulty in mastication and normal tongue movement.

**Key Words :** Torus mandibularis, Surgical excision, Exostosis, Benign osseous lesion

## INTRODUCTION

Torus mandibularis defined as an exostosis, unilaterally or bilaterally, situated on the lingual aspect of the mandible above the mylohyoid line in the region of the premolars. Mandibular tori generally exist as smooth, rounded bony protuberances, or exostoses, which vary in size and number, and occur commonly in the premolar region of the lingual aspect, of the mandible. They can occur unilaterally and bilaterally. These tori were classified as: (a) single unilateral torus, (b) multiple unilateral tori, (c) single bilateral tori, and (d) multiple bilateral tori.

There are variations in the incidence of mandibular and palatal tori depending on ethnicity; however, the incidence of mandibular tori is reported to be 6% to 7%.<sup>1</sup>

Exostosis is benign processes, mostly asymptomatic, but removal can be indicated in many cases.<sup>2</sup> The overlying mucosa can be quite thin and more prone to ulceration, leading a patient to seek removal. Exostoses can interfere with proper prosthesis placement or grow large enough to interfere with oral hygiene and speech. In some patients with mandibular or palatal tori, prophylactic removal may facilitate alveolar ridge bone augmentation.

In the present case we decide to remove the tori due to its large size, which causing interference with normal tongue movement and difficulty in mastication.

## CASE REPORT

A 30 year old male reported with complaint of speech disturbances and difficulty in tongue movement because of huge mandibular tori which occupied the floor of the

mouth. Physical examination revealed a healthy man who appeared to be younger than his stated age. Extra oral examination was not significant. No extraoral disfigurement was found. No lymphadenopathy was observed. On intra oral examination teeth were well aligned and a large swelling was present in relation to lower left first molar measuring about 4 X 2.5 cm in size extending upto lower left canine (Fig. 1). Medially the swelling extends upto the midline. The swelling was covered with thin, intact mucosa with normal colour. It was not tender and hard in consistency on palpation. An occlusal radiograph of the mandible showed large separate swelling, having thick cortical bone with spongy bone filling the centers. Dentascans of mandible showed swelling with radioopaque margin, swelling was attached to the lingual cortex of mandible in premolar region (Figs. 2, 3). Due to the chief complaint of patient being difficulty in mastication and speech it was decided for surgical excision of swelling. During surgery mucoperiosteal flap was raised under local anesthesia, multiple holes were made at the junction of swelling and lingual cortex (Fig. 4) and after that the bony swelling was removed in toto with chisel (Fig. 5). The lingual plate of the mandible was smoothed with a bur. Complete bony swelling was removed above the mylohyoid muscle. Mucoperiosteal flap was sutured back. The specimen was sent to lab for histopathological examination and diagnosis of torus mandibularis was confirmed. Healing was adequate 5 days after the surgery. Post operative healing was uneventful. No recurrence was seen after 6 months of excision.

## DISCUSSION

Exostoses are described as non-pathologic, localized bony protuberances that arise from the cortical bone and sometimes from the spongy layer. Such developmental anomalies, or hamartomas, are pathologically not significant, and they most frequently develop in the

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Fig. 1 : Preoperative photograph of torus.

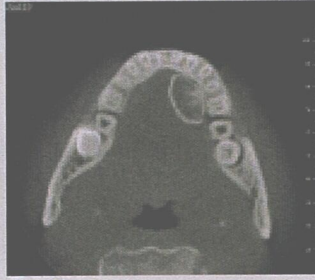


Fig. 2 : Dentascans of torus (axial view).



Fig. 3 : Dentascans of torus (coronal view).



Fig. 4 : Intra operative photograph.



Fig. 5 : Excised torus.

human jaw bone. Two of the most common exostoses that occur in intraoral locations are on the midline of the hard palate and on the lingual aspect of the mandible in the cuspid/ premolar region, are termed torus palatinus (TP) and torus mandibularis (TM).<sup>3,4</sup>

TM, the other most common exostosis, is a bony exophytic growth located in the cuspid/ premolar area of the lingual surface of the mandible and superior to the mylohyoid ridge, usually bilaterally. TM was first described by Danielli<sup>5</sup> in 1884; however, the term torus mandibularis was first used in 1908 by Fiirst, who used it to denote a bony protuberance that developed on the lingual surface of the mandible, most often in the premolar and canine areas.

As per the etiology, the most acceptable theory is that the torus palatinus and mandibularis are hereditary. Suzuki showed that where parents had either type of torus, the frequency of occurrence of torus in their children was 63.9 per cent, while the occurrence in children of parents free of torus was only 7.9 per cent. Another theory is that the torus mandibularis may grow as a reaction to forces of muscle function. Certain races exhibit a high incidence of tori (for example, American, Indians, Eskimos, and Japanese). The outgrowth of the tori does not continue after the third decade, and tori do not change to malignant lesions. The mucosa overlying the torus is thin, blanched, and intact.

The discovery of these exostoses usually occurs incidentally during a routine clinical examination, as

they usually do not produce any symptoms, except in cases of significant growth, where they cause difficulty in speech and mastication or in edentulous patients, in which case they may hinder the construction of the prosthesis. Its elimination in dentate patients cannot be justified, unless it can be used clinically or as a filling biomaterial in order to correct bone defects that patients may suffer in some part of their jaw area.

## CONCLUSION

Sometimes patients may present phonatory disturbances, limitation of masticatory mechanics, ulcerations of the mucosa, food deposits, prosthetic instability, and some patients may experience cancerphobia, and consult a professional in order to look for a solution. Removal of the tori is not always necessary. The most frequent cause of surgical excision continues to be the need for prosthetic treatment<sup>6</sup> or that of being a potential source of autogenous cortical bone for grafts in periodontal surgery, cyst surgery or implant surgery<sup>6,7,8</sup> although long-term stability of the grafts is uncertain.

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