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RARE CASE OF FAMILY TORUS MANDIBULARIS: CLINICAL REPORT

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ABSTRACT
Tori are common reactive irregular bony outgrowths (exostoses), seen in the palate (torus palatinus: midline) or mandible bi- or unilateral along internal part of mandible above linea mylohyoidea (torus mandibularis) in the molar-premolar area. The torus is considered to be a developmental anomaly, although it is not manifested until adult life and often it will continue to grow slowly throughout life. The torus can be diagnosed by physical examination using X-ray scanning and should be surgically removed in case of chronic trauma of a tongue, disorders of oral functions such as breathing, talking, swallowing or eating. In case of unilateral location must be differentiate with tumors of bone tissue.

KEYWORDS: Oral tori; mandibular tori, exostosis.

INTRODUCTION

Tori ('lumps' or 'eminence' in Latin) are exostosis growing from cortical bone and they are covered with thin layer of mucosa.[1] They are in 80% symmetric and can be found on the lingual side of mandible near premolars and canines. They increase in size slowly and usually don't cause troubles if patient have not such problems as sialolithiasis in the Wharton duct[2], difficulty in speech, ulcerations of mucosa, food lodgment and interfere with prosthetics. In some cases, they can provide pain, discomfort while talking, breathing, eating and ulcerating of overlaying mucosa.[3, Mal -4]

The literature survey claims there is no evident of gender predilection but some have found it slightly more common in men.[1,2] In a study on the Norwegian population, Haugen cited values of 8.53% prevalence in men and 6.36% prevalence in women. The mandibular torus seems to be more prevalent in African-Americans (33.8%) than Caucasian Americans (24.8%). The mandibular torus was rarely found in Chileans (0.05%), a feature shared by the torus palatines; comparing the prevalence in German and Thai populations showed a higher prevalence of torus mandibularis in Thai patients and a lower of the torus palatinus than in Germans.[5] It is important to make emphasis on the varies in prevalence between ethnic groups in an Indian population after examination of 3087 patients/ The findings shows lower prevalence in whites - ap. 8%, in blacks - ap. 16%, higher prevalence in Asian and Inuit populations.[6]

The torus palatinus is histologically characterized as mature cortical and trabecular bone with minimal osteoblastic activity[5], revealed decalcified dense bony tissue, lacunae, normal osteocytes, and scattered areas of connective tissue containing dilated blood vessels. Histologic examination shows dense bony tissue, with normal osteocytes and lacunae[3], it has a limited amount of bone marrow and is covered with a thin layer of poorly vascularized mucosa.[1]

Research conducted by Eggen (1989) on genetic determination shows that there is roughly a 30% genetic contribution, but that 70% of the incidence of torus mandibularis is attributable to environmental factors).[5] But we did not find in scholarly sources information about family stories of Torus Mandibularis, Torus is mainly removed owing to prosthodontic reasons, as it may also be used as biomaterial in periodontology and in implantology.

CASE REPORT

In November 2018 a 53-year-old female patient applied to the Bogomoletz National Medical University Department of Oral and Maxillofacial Surgery with a complaint of discomfort in the area of inner side of lower jaw, progressing difficulty in speech and eating during last 3 years.

Extraoral examination has shown the face symmetry, free mouth opening; not palpated regional lymph nodes. The intraoral examination revealed 2 symmetric groups of fused tubercles, painless, nodular, bony hard masses

of approximatelly 2,5x2 cm sizes in the canine-premolar area with thin overlaying pale mucosa. Tongue movements were quite limited.

Fig.1: Status localis before treatment.

General condition: The patient was moderately built and well nourished. Her face was bilaterally symmetric. Extraoral examination revealed no abnormal features.

Results of blood tests: blood indicators were corresponded to age norm.

Family anamnesis: 29-year-old patient`s son has similar mandibular bone deformation. Noticed changes of mandible bone approximately 2 years ago, but refused from any examination and treatment. As argument he mentioned that it does not disturb him as much as his Mom and he fears to any intervention.

Other relatives have any complains on disorder of bones.

CT examination: Bone macrostructures are correctly developed, symmetrically, of normal shapes and sizes, with no signs of deformation and destruction; but there are visualized bilateral and symmetrical bone outgrowths above the Linea Mylohuoidea; there is also notice a growth of bone medullary, which has homogeneous structure and density of the compact bone. Conclusion: mandibular tori (exostoses) (Fig 2,3).

Fig 2: Tori on the lingual side of the mandible.

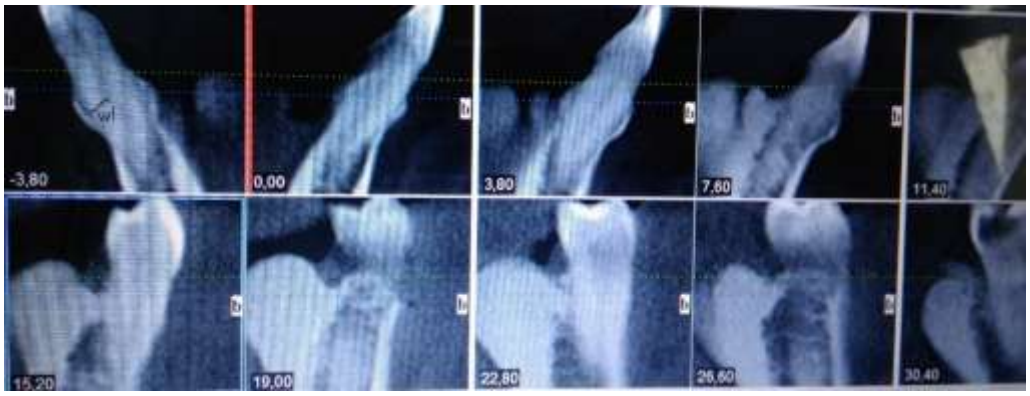

Fig 3: Bone outgrowth near premolars.

After radiographic evaluation and routine hematological investigations, patients consent was taken for surgical removing of the extra grown bone tissue.

Surgery report: under the local anaesthesia and NLA was provided a frenuloplasty for the better mobility of the tongue. Mucoperiosteal flap was raised from the lower left side of the canine till the first molar and the exostosis was removed [Fig 4,5] and the flap was sutured. The patient was asked to revisit after 14 days for suture removal.


Fig. 4, 5: Removed tori.

Fig. 6: Status localis, 14 days after surgery.

Histopathological examination showed that the masses consisted of dense lamellar bone, with normal tissue proliferating. No tumor tissue component was present.

Fig. 7: Status localis in 2 Months after surgery.

CONCLUSION

We have observed rare family case of Torus Mandibularis – Mother and son. Other relatives could not be examined. The female patient suffered from deformation of Mandible, discomfort in speech and eating in advanced stage. Treatment of it involves surgical removal and total recovery occurs after 14-21 days. No complications like wound dehiscence, inflammation, emphysema, salivary duct injuries were encountered.

However, much larger tissue's sample is required to take to look for some genetic factors in etiology of tori.

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