

MANAGEMENT OF BILATERAL BONY EXOSTOSIS IN MANDIBULAR SUBLINGUAL REGION: A CASE REPORT

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ABSTRACT

Oral cavity is associated with both soft and hard tissue enlargement. Hard tissue Growths can be of varying types mainly tori, exostosis and Paget's disease. Tori usually occur bilaterally at the mandibular anterior region with predilection at sublingual region. It can be explained as a protuberant and benign exostosis of jaw bones that develops usually on the lingual aspect of the jaws or hard palate. The incidence rate is 10-30% with preponderance in adults. This pathologic condition is usually manifested around the age of puberty and continues to grow during adulthood. Often they donot pose any serious problem but they can interfere with mastication, speech, oral hygiene and prosthesis in older ages. Also, their enlargement with advancing age may also lead to superficial ulceration, inflammation, osteonecrosis and various other complications. Most of them are asymptomatic and first noticed by the patients or detected incidentally by the dentists during oral examination. We hereby present a case report of surgical excision of bilateral exostosis in mandibular anterior region(sublingual gland proximity)..healing was eventful and no re-occurrence was observed.

KEYWORDS: Surgical Excision, Bony exostosis, Premolar region, osteoma, tori

INTRODUCTION

Osteoma or hyperostosis is a non-pathologic and benign new bony growth. They could be defined as developmental anomalies which are commonly seen in adult.1 They often increase in size on advancing age. On clinical evaluation, the lesions are asymptomatic, slow-growing in nature and could resolve without treatment. However , they sometimes, may grow over several centimetre and create problem in the fabrication and wearing of removable dentures or prosthesis.1,2 It is roughly calculated that the incidence rate of tori is roughly 40 as per 1500 populations and predilection is seen mostly in Eskimos, American Indians and lastly, the Asians. The word Torus is derived from Latin word, which refers to a lump. Etiology is totally unclear but often, a genetic association is expected.3. Tori which are located in the midline of the hard palate are called as palatal torus, or torus palatinus, and simultaneously, on the lingual aspect of the mandible are called a mandibular torus, or torus mandibularis.3

Most of them are often asymptomatic and are first noticed by either the patients or on clinical inspection by the concerned Dentists . Management includes excision of tissue by surgical excision, lasers or Electeocautery.4 In this case report, case of bilateral exostosis in mandibular anterior region(sublingual gland proximity) was managed by surgical Excision..Healing was Completely eventful and no re-occurrence was observed.

CASE REPORT

A female patient of 22 years old referred to the department of Oral Medicine & Radiology with a chief complaint of pain and discomfort while chewing hard food particles in the lower left back tooth region since 6 months. The patient had a history of trauma with tooth brush in the same region mandibular left back teeth region 1year back. No relevant medical history was revealed. On clinical examination intraorally, there was bony growth seen bilaterally extending from the distal of 34 to 35 & 44 to mesial of 45, measuring approximately 3 X 2 cm in size (Fig. 1).



Figure-1. Preoperative view of bilateral mandibular tori

On palpation it was non tender and hard in consistency, suggestive of mandibular tori. The patient was explained about the incidental pathological finding. she also revealed the trauma by hard food substance on the same side and reported difficulty in chewing food and even on slight touch. Radiographic examination with mandibular occlusal radiography revealed oval radiopaque areas bilaterally in premolar region (Fig. 2). Based on these findings, a provisional diagnosis of suspected bilateral mandibular tori was made.



Figure-2. Occlusal radiograph confirming tori.

After proper investigations, the patient was given written and verbal information on the nature, risks and benefits of the procedure and a written signed, informed consent was obtained prior to the treatment. The procedure was performed under local infiltration (2 % lidocaine, with adrenaline 1:2,00,000).It was completely excised from the base with precautions (Fig-3 & 4).



Figure-3. Intraoperative confirmation of tori.



Figure-4. Post operative excision of tori.

Dressing was given on the excised tissue region and post -operative instructions were reinforced. Healing was completely uneventful and no reoccurrence was observed post operatively after 6 months.

DISCUSSION

The tori literally means “bulge” or “lump” in Latin word which is explained as a benign new bone growth. It is often called exostoses and is mostly observed on the hard palate. The commonly associated terms are palatal tori or torus mandibularis/ buccal exostoses, and similarly on the lingual surface of mandible, called mandibular tori or torus mandibularis. 3

As per the literature analysis, etiology is totally unclear but hereditary condition is mostly suspected. 2,3 The exostoses are organized by thick corticated bone enveloped by a thin and poorly vascularized mucosa which forms a hard mass in the oral cavity. 5 The prevalence of torus palatinus as per analysis of United States Population has been described as 25–40% and in context to that; it is widely accepted that palatal tori are 2 times as prevalent in females than males. 6 Also, there are a lot of variations in which it is hypothesized that 10% of the people of United States shows mandibular tori. 6

Torus mandibularis as already mentioned happens bilaterally near the canine and premolar region of the mandibular lingual aspect above the mylohyoid ridge. Sometimes, bilateral tori extend and are encountered at the midline; popularly called as “kissing tori. 7 The peak prevalence of torus palatinus ranges from 9% to 70% for palatal torus and 1% to 60% for mandibular torus. 8 They usually start developing after puberty and increased in size steadily over the years.

A basic classification based on their morphology differentiates them into following categories. 8,9,10(i) Flat tori – It is a slight rounded bony lump with a rolled surface for mandibular tori and it extends uniformly on both sides of the palate.

(ii) Lobular tori: It arises from a single base which is pedunculated or sessile lobular lump seen on the mandible or palate.
 (iii) Nodular tori: They are many bony prominences each arising from individual bases and coalesce when they extend and form grooves between them. (iv) Spindle tori: It is elongated and seen next to the line of the mid-palatine region for palatal tori and bilaterally in the mandibular lingual surface.

Although there are no clear criteria for classification by size, but two group of sizes are given namely ,mm, 2–4 mm, and above 4 mm or (2) 3 mm, 3–6 mm, and above 6 mm. 2 mm and 3 mm have been found to be common sizes. Usually, tori are 1.5 mm-4 cm in diameter and can be single growth or grouped together in a cluster, that is, nodular. Buccal exostosis occurs less frequently than tori. 11Buccal exostosis and tori are benign lesions and do not possess malignant potential.^{3,4} The most acceptable theory is of genetic origin (29.5%) of cases and 70% of cases with association of increased masticatory forces probably , occlusal stress.¹² No surgical management is generally needed for tori as it is symptomless and however it becomes so large that.

LIMITATIONS

Post-operative follow up is very small (6 months)
 Long term clinical trials are must to confirm the re-occurrence rate.

CONCLUSION

Mandibular are completely asymptomatic, non-neoplastic, slow- growing, self-limiting, and painless growth unless infected or injured. Surgical treatment is usually not necessary but verbal counselling is required unless it is large size, interference in speech, and mastication. Early detection forms the key for best prognosis.

CONFLICT OF INTEREST

The Authors declare no conflict of interest.

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ETHICAL COMMITTEE APPROVAL

Not required as per case report formats.

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