Case Report:
Mandibular Osteolipoma

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Abstract

Introduction: Osteolipoma is an uncommon lesion that rarely occurs in the oral cavity.

Subjects and Method: A 50-year-old man presented with a 5-year history of a small painless mass in the right lingual mandibular alveolar mucosa adjacent to the 1st molar tooth. The lesion was easily excised under local anaesthesia and sent for pathological examination.

Result: Histologically, the lesion was confirmed to be an osteolipoma. Recurrence was observed after one year follow-up.

Conclusion: Although osteolipoma is very rare in the oral cavity, it is important to keep them in mind when a lesion with adipose tissue in combination with ossification is encountered.

Key Words: Osteolipoma — Lingual — Mandibular — Alveolar — Mucosa.

Introduction

LIPOMAS are the most common benign soft-tissue tumors composed of only mature adipose cells without cellular atypia [1]. However, other mesenchymal elements such as smooth muscle, fibrous, chondral or osseous tissue may occasionally be found in addition to adipocytes. Variants of lipoma have been named according to the type of tissue present such as fibrolipoma, myelolipoma, leiomyolipoma, chondrolipoma, osteolipoma and angio-lipoma [2]. Lipoma can be located in the intraosseous region or adjacent to bone and referred to as intraosseous, parosteal, or periosteal [3]. Osteolipoma is a rare tumor that has been reported in various anatomical locations, being even more rare within the oral and maxillofacial region [4].

So it is important to publish a case report of osteolipoma through this paper.

Subjects and Methods

On May 2012 at Maxillofacial Unit of Kena General Hospital, a 50 year old male patient was presented with slowly growing intraoral lesion since 5 years. The patient has no significant medical history and no systemic problem was detected. The lesion was located at the mandibular right lingual alveolar region related to the 1st molar. It was oval in shape and 2cm in diameter covered by normal mucosa, firm to hard and painless on palpation (Fig. 1). Three dimensional computerized tomography showed the lesion as well circumscribed mass related to the lower first molar (Fig. 2) and in coronal view the lesion appeared as circumscribed radio opacity with dispersed radiolucency (Fig. 3). Differential diagnosis included fibroma, neurofibroma, ossifying fibroma, osteoma. The lesion was excised under local anesthesia, after raising mucoperiosteal flap, the wound was sutured primarily and healing was good. The biopsy was gritty in consistency and 2cm in diameter (Fig. 4).

Results

Through histopathological examination the lesion was composed of mature fat cells with scattered bone trabeculae. There was no signs of cellular atypia nor abnormal mitosis (Fig. 5). The diagnosis was osteolipoma. The patient was followed-up for one year and there was no recurrence.
Mandibular Osteolipoma

Fig. (1): Oval shaped lesion related to lower 1st molar.

Fig. (2): Radiopaque mass related to lower 1st molar.

Fig. (3): Coronal section of ct showing circumscribed radio opacity with dispersed radiolucency.

Fig. (4): The excised biopsy with gritty consistency.

Fig. (5): Mature fat cells with scattered bone trabeculae.

Discussion

Lipomas are the most common benign soft-tissue tumors of adults and also the most common tumor of the head and neck region, corresponding to approximately 13% of lipomas, with patients ranging between 40-60 years of age and a slight male predominance [8]. However osteolipomas, or lipomas containing mature lamellar bone irregularly distributed in the predominant adipose component, are extremely rare in clinical practice [4,6]. The present case of osteolipoma was discovered in a patient of 55 years old in accordance to the literature. This case can be considered the 2nd reported case of osteolipoma affecting the alveolar mucosa after reviewing the literature and according to [7]. Clinically, lipomas tend to be circumscribed soft mass with sessile or pedunculated base. They can have a yellowish or pink color like the adjacent mucous membrane depending on its depth [8]. In the present case, osteolipoma represented as circumscribed firm mass covered by pink normal mucosa although it is superficial this may be due to decreased fatty content and tendency for bone formation. Histologically, the present case of osteolipoma contains mature lamellar bone irregularly distributed in the predominant adipose component and this the same as described by [4,6]. The pathogenesis of osteolipoma is still not clear. Two main theories of the pathogenesis of ossifying lipoma: First, these tumors may originate directly from multi potent mesenchymal cells since osteolipoma resembles a benign mesenchymoma [9]. Alternatively it has been suggested to arise after repetitive trauma, metabolic changes, or ischemia leading to metaplasia of preexisting fibrous elements within
the lipoma and development into osteoblasts [10]. The histological findings and the clinical nature of the present tumor support the second hypothesis. Usually the appropriate treatment for the osteolipoma is surgical excision and recurrences have not been reported yet [7].

Conclusion:

Osteolipoma is a tumor of rare pathological picture and affecting the alveolar ridge that is rarely affected by lipoma. And this intity can be added to the differential diagnosis for the lesions that affect the alveolus.

References