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OSTEOMA OF MANDIBLE - A CASE REPORT

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ABSTRACT:

Osteoma is an slow growing asymptomatic lesion. It is an benign tumour composed of mature compact or cancellous bone. It can be central, peripheral or extraskeletal. The central osteoma arises from the endosteum, the peripheral osteoma from the periosteum and the extra-skeletal soft tissue osteoma usually develops within the muscle [1]. Here a case report of osteoma in the lower border of the angle of the mandible in a 14 year old patient is presented. The osteoma was surgically excised.

KEYWORDS: peripheral osteoma, angle of the mandible

INTRODUCTION

Osteoma is an slow growing asymptomatic lesion. It is an benign tumour composed of mature compact or cancellous bone. It can be central, peripheral or extraskeletal. The central osteoma arises from the endosteum, the peripheral osteoma from the periosteum and the extra-skeletal soft tissue osteoma usually develops within the muscle¹. The most frequent sites affected in the mandible are the posterior body, followed by the condyle, angle, ascending ramus, coronoid process, anterior body, and sigmoid notch².

Osteomas are more commonly found in Gardeners Syndrome ^{1.} Here a case report of osteoma in the lower border of the angle of the mandible in a 14 year old patient is presented. The osteoma was surgically excised.

Case report: A 14 year old male patient reported to our Maxillofacial Surgery unit in C.K.S. Theja Dental College and Hospital with Complain of a swelling on the facial aspect on the lower border of the angle on the left side of mandible. He had been aware of slow but steady increase in the size of the lesion over past 4 years. The lesion was not associated with pain, and there was no previous facial trauma, and his medical history was not contributory.

On Clinical examination revealed extra oral swelling on the left side of the mandible. The regional lymph nodes are not palpable. Intraoral examination reveals no swelling. The overlying mucosa was normal over the site.

There was no pain and tenderness or par aesthesia. All of the posterior teeth were vital. A solitary, roughly round 2x2cm , well defined radio opaque lesion without a radiolucent rim of mandible was detected with panoramic

radiography. (Fig.1) The lesion extended distally of the first molar to the mesial aspect of the third molar. These clinical and radiographic features were sufficiently supportive for working diagnosis of Peripheral Osteoma. There were no features of Gardeners syndrome. Because the lesion was actively growing and caused facial swelling, patient was prepared for surgery. Under General anesthesia, the lesion was totally excisioned using a chisel and rotary instruments, via intra oral approach, and curettage of the cavity was undertaken.(Fig.2). Intra operatively, the inferior alveolar nerve was determined and preserved. Post operatively, the patient received systemic antibiotics, Analgesics and mouth wash for 7 days. Patient presented for a postoperative visit and suture removal a week later. The healing was progressing normally. There was no post operative complications. The surgical specimen was submitted for histopathological examination. Tissue specimens were fixed in 10% formaldehyde and then decalcified in 8% formic acid solution. Tissue blocks were cut with 6µ thickness and slides were stained with haematoxylin and eosin.(Fig.3). The histopathological diagnosis confirmed the clinical diagnosis of Peripheral Osteoma. The patient was scheduled for regular follow-up.

Discussion : It has been reported that osteomas have no sex predilection ³. Peripheral Osteomas of the jaw bones is quite rare. These lesions are more frequent in the mandible than the maxilla ⁴. The lingual surface and lower border of the body are the most common locations of mandibular lesions ⁵. Rarely, as in our case, the lesions are

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Fig.1. Orthopantamograph showing a well defined radioopaque lesion on the left side of the mandible in the molar area.



Fig. 2. Removal of the lesion

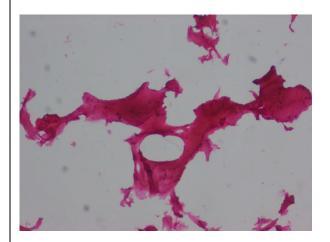


Fig.3. Histopathological appearance of the lesion

located on the buccal aspect of the angle of the mandible. The exact etiology and pathogenesis of peripheral osteoma is unknown. Neoplastic and reactive causes have been suggested as possible etiologic factors⁶. Clinically, peripheral osteoma appears as an unilateral and well-circumscribed mass ranging from 10 to 40mm in diameter⁷. Lesions are usually asymptomatic and can be discovered in routine clinical and radiographic examination. Sometimes, depending on the location and size of the lesion, it may cause swelling, facial asymmetry, and functional impairment⁸. In our case, the lesion had reached significantly large dimensions and caused facial asymmetry, without any other clinical symptoms.

Differential diagnosis: peripheral osteoma should be differentiated from several pathologic entities, such as exostoses, osteoblastoma, and osteoid osteoma, latestage central ossifying fibroma, or complex odontoma. Removal of an asymptomatic peripheral osteoma is not generally necessary. Surgical intervention is indicated only if it becomes large enough to cause facial asymmetry and functional impairment⁹.

CONCLUSION

We have presented a case of a large osteoma on the lingual surface of the angle of the mandible. The lesion had grown slowly for 4 years and caused facial asymmetry. Following histological diagnosis, surgical excision was done. Recurrence of peripheral osteoma after surgical excision is extremely rare. However, it is appropriate to provide both periodic clinical and radiographic follow-up after surgical excision of a peripheral osteoma.

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