CASE REPORT

Osteoma of the mandible: Two case reports

Mandibulada osteom: 2 olgu sunumu

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SUMMARY

Osteoma is an uncommon benign neoplasm composed of mature bone which may located centrally (endosteal), peripherally (periosteal) or extraskeletally. Osteomas can be solitary or multiple masses, and they are generally asymptomatic. They rarely occurring in craniofacial bones. The diagnosis is based on clinical, radiological and histopathological features. The authors report the diagnosis and the management of two cases of osteoma within the current literature.

Keywords: Osteoma, mandible.

ÖZET

Osteom nadir görülen; santral (endosteal), periferal(periostal) veya iskelet sistemi dışında yerleşim gösterebilen olgunlaşmış kemikten oluşan benign neoplazmalardır. Osteomlar soliter ya da multipl kitleler halinde görünebilirler ve genellikle asemptomatiktirler. Kraniyofasiyal kemiklerde daha az gözlenirler. Teşhis klinik, radyolojik ve histopatolojik özellikler göz önüne alınarak ortaya konabilmektedir. Yazarlar mandibulada yerleşim gösteren iki olgunun teşhis ve tedavisini mevcut literatür dahilinde sunmaktadır.

Anahtar Kelimeler: Osteom, mandibula.

INTRODUCTION

Osteoid osteoma is a benign bone-forming tumor which consists of a demarcated central nidus with surrounding reactive sclerotic bone. The nidus is seldom larger than 2 cm in diameter and may or may not contain a dense or patchy mineralization located centrally. Osteomas are usually slow-growing, painless, mature bone tissue. At the mandible, they are mostly seen in the angle and the condyle, followed by the mandibular body and the ascending ramus. Osteoid osteoma is most commonly seen in the second and third decades of life. It can involve every bone, but is most common in long bones of lower extremities with a male to female ratio of 2 to 1. In most cases, patients complain of severe localized pain that usually increases at night and is relieved with nonsteroidal anti-inflammatory drugs (NSAIDs). Osteoid osteoma rarely occurs in the jaws. This report describes the radiographic and clinical features of two cases of osteomas located at the mandible (1).

CASE 1

In September 2015, a 39-year-old woman was referred to the Department of Oral and Maxillofacial Surgery at Istanbul University for the assessment of a lesion discovered at the right side of the mandible. The CBCT showed a well-circumscribed hyperdense lesion at the lower first molar region (Figure 1). Extraoral examination did not reveal any abnormal findings. The intraoral examination showed no expansion or any signs of inflammation. There was no history of trauma. There was no sign of malignancy; therefore the lesion was totally removed under local anesthesia (Figure 2). The histopathological assessment was reported as osteoma. Six months after surgery, no sign of recurrence was observed (Figure 3).

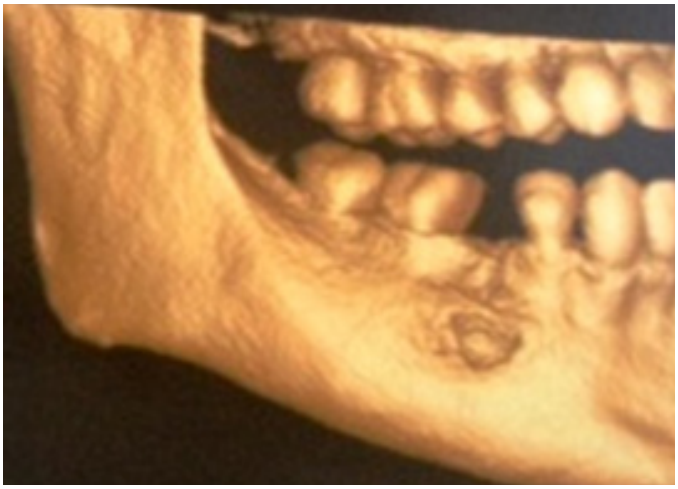

Figure 1: *Pre-op view of CBCT*

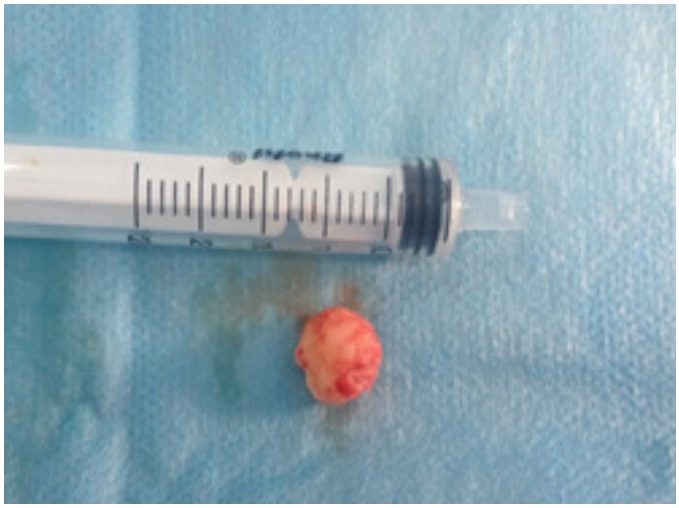

Figure 2: *Removed lesion*

CASE 2

In June 2015, a 30-year-old woman presented to the Department of Oral and Maxillofacial Surgery at Istanbul University, with the complaint of swelling at the posterior right side of the mandible. The panoramic radiograph showed well circumscribed radio-opaque lesion at the border of the mandible (Figure 4). The CBCT showed more in detail just above the inferior alveolar nerve at the molar region of the mandible of the right side (Figure 5). The sagittal view showed that the lesion was attached to the buccal bone (Figure 6). Extraoral examination did not reveal any abnormal findings but intraoral examination showed massive swelling at the molar region during palpation. No additional pathological sign was observed. The lesion was removed totally under local anesthesia (Figure 7). The histopathological assessment was reported as osteoma. The follow-up of the patient is still continuing. No pathological sign was reported from the patient.

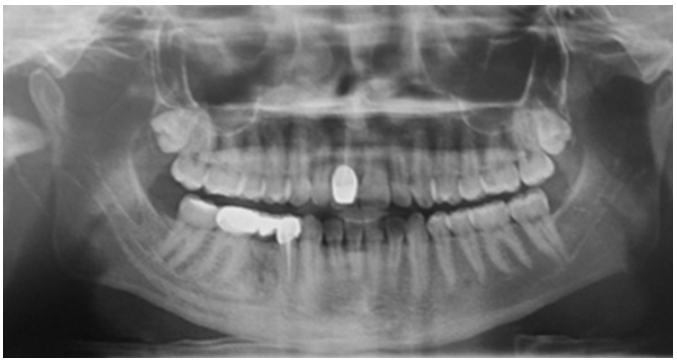

Figure 3: *The control radiograph 6 months after surgery*

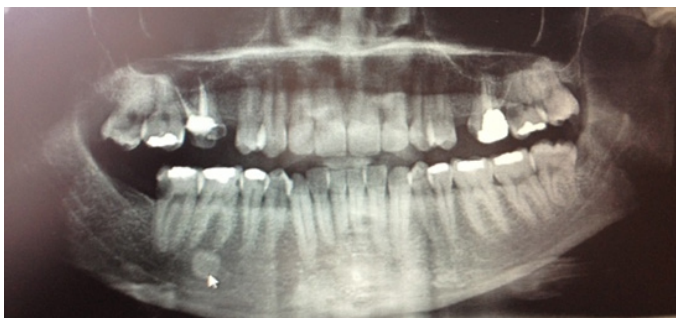

Figure 4: *Pre-operative panoramic radiograph showing the borders of the lesion*

DISCUSSION

Some investigators reported that trauma, infection or inflammatory conditions are the common etiological factors of the osteoma (2). On the other hand trauma or infection were not present in our cases. The mandible is affected more than the maxilla and especially in the body of the mandible, as reported in our cases. The central type arises from the endosteum, the peripheral counterpart from the periosteum, and the extraskeletal soft tissue osteomas usually develop within muscles (3). The osteomas of the jaw are frequently located peripherally rather than in a central location, with a ratio of 14:1 in favor of the peripheral location (2). In the first case the lesion was totally in the marrow of the bone but in the second case there was just one nidus which originates from the buccal side of the bone but the total part of the lesion was under the periosteum.

Cone-beam computed tomography (CBCT) is especially useful in diagnosing bone tumors in the complex anatomical site of the jaws and a small lesion like osteoid osteoma covered with thick bone is best elucidated by CBCT or CT (4). The discovery of an osteoma of the facial skeleton should raise the possibility of Gardner's syndrome. Patients with Gardner's syndrome may present with symptoms of rectal bleeding, diarrhea, and abdominal pain. The triad of colorectal polyposis, skeletal abnormalities, and multiple impacted or supernumerary teeth is consistent with this syndrome (5). In our cases there were no signs of Gardner's Syndrome.

Complete excision is currently the recommended treatment because it often relieves the pain and cures the disease. Although, some examples of spontaneous remission of osteoid osteoma have been noted, the data are insufficient for identifying such cases in advance (6). In the present cases the lesions were completely removed. No post-operative problem was observed.

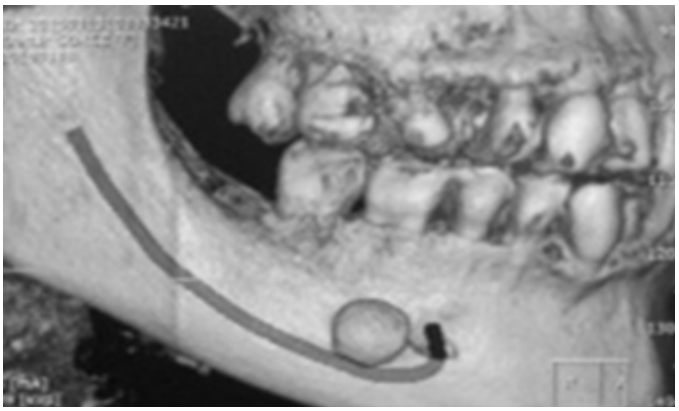

Figure 5: *The view of the lesion on CBCT model*

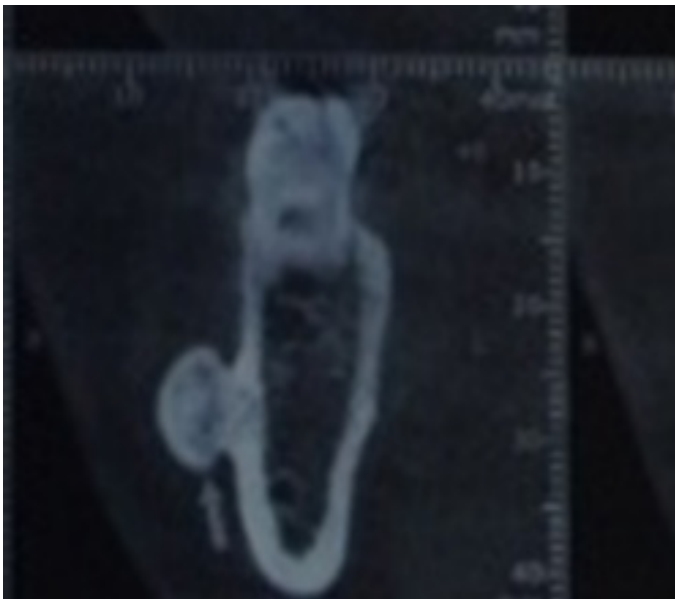

Figure 6: *The sagittal view of the lesion*

Figure 7: *Removed lesion*

CONCLUSION

Osteoma of the jaws should be considered in the differential diagnosis of other jaw lesions. Ultimately, a histopathological examination is required for diagnosis. Complete surgical removal is the treatment of choice.

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