



## Case Report

# A huge osteoma of the mandible detected with head and neck computed tomography



Yu Ohashi<sup>a,\*</sup>, Akiko Kumagai<sup>a</sup>, Naoko Matsumoto<sup>a</sup>, Mitsuru Izumisawa<sup>b</sup>, Hideki Hoshi<sup>a</sup>, Yoshiki Sugiyama<sup>a</sup>

<sup>a</sup> Division of Oral and Maxillofacial Surgery, Department of Reconstructive Oral and Maxillofacial Surgery, School of Dentistry, Iwate Medical University, Iwate, Japan

<sup>b</sup> Division of Dental Radiology, Department of Reconstructive Oral and Maxillofacial Surgery, School of Dentistry, Iwate Medical University, Iwate, Japan

## ARTICLE INFO

## Article history:

Received 10 June 2014

Received in revised form

30 September 2014

Accepted 13 October 2014

## Keywords:

Central osteoma

Mandible

Computed tomography

Oral function

## ABSTRACT

We encountered a patient with a huge osteoma extending over half of the mandible, which was incidentally discovered on a head-and-neck computed tomography (CT) by an otolaryngological examination for vertigo.

A tumorous lesion of the right mandible was noted, and the patient was referred to our department. The tumor extended from the median mandible over the right anterior margin of the ramus of the mandible.

To improve the abnormal intraoral morphology, tumor resection and orthopedic surgery were performed. The histopathological diagnosis was a cancellous osteoma.

Dentures were attached after surgery, and the postoperative course has been favorable with no tumor re-enlargement.

© 2014 Japanese Stomatological Society. Published by Elsevier Ltd. All rights reserved.

## 1. Introduction

Osteomas are benign osteogenic tumors characterized by the production of mature bone and slow growth [1]. The lesion typically remains asymptomatic unless there is obvious disfigurement or discomfort to the patient [2]. Most cases are left untreated for a long time, and patients visit a hospital when they become aware of painless swelling and masses. The mandibular angle and the lingual molar and mental regions are frequently observed development sites of osteomas, and the lesions are generally localized [3].

We encountered a patient in our department in whom an abnormality was incidentally discovered on a head-and-neck computed tomography (CT) performed to examine vertigo, and a tumor was diagnosed. The tumor grew in contact with the upper residual teeth and gingiva, extending over half of the mandible. Herein, we describe the case.

## 2. Case report

A 65-year-old woman was referred for a mandibular tumor from the otolaryngology department. The mandibular tumor was

discovered accidentally by CT that was taken for an external ear canal tumor. The patient had noticed a protrusion of the right mandible several years previously; however, she had left it untreated. The familial medical history was not contributory; however, the patient had been receiving treatment for diabetes, a cerebral infarction, and retinal detachment.

The patient presented with facial asymmetry, and mild swelling was noted in the right mandibular region. Many small, elastic, soft masses were noted in the skin in this region (Fig. 1A and B), which were histopathologically diagnosed as epidermoid cysts on biopsy. A mass was found in the ipsilateral external ear canal (Fig. 1C). A 61-mm × 37-mm pediculate bone protrusion was present in the right mandible, and it fit the upper right canine and gingiva on occlusion (Fig. 2A). The tongue was pressed leftward, and mouth opening was not impaired (Fig. 2B).

The panoramic X-ray radiography findings were as follows: a marked expansion of alveolar bone was observed in the median mandible over the right mandibular angle. A tipping movement of the teeth was marked, and impermeation was partially enhanced in the lesion; no apparent abnormality was detected in the trabecular structure. No laterality was observed in the anatomical position of the mandibular canal or mental foramen (Fig. 3).

A CT examination showed that a marked buccolingual protrusion was present in the right lower frontal tooth region over the molar region. The cortical bone had thinned, the border was

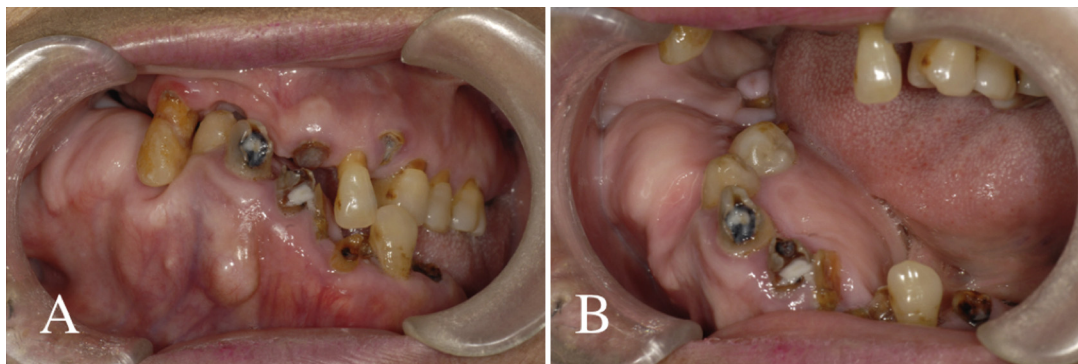
\* Corresponding author at: 19-1 Uchimaru, Morioka, Iwate, 020-8505 Japan.

Tel.: +81 19 651 5111x4512; fax: +81 19 623 6757.

E-mail address: [yu.yuu.com@rainbow.plala.or.jp](mailto:yu.yuu.com@rainbow.plala.or.jp) (Y. Ohashi).



**Fig. 1.** External oral photographs on the first examination. (A and B) Many small masses were present in the skin of the right lower jaw. (C) The tumor was present in the left external ear canal.



**Fig. 2.** Intraoral photographs on the first examination. (A) The mandibular neoplasm contacted the right upper canine and gingiva on occlusion. (B) The tongue was pressed leftward by the mandibular neoplasm.

unclear, and its continuity was partially lost. The inner region showed a mixture of impermeated and permeated regions, and a tipping movement of the adjacent teeth was noted. No periosteal reaction was observed, and the boundary was unclear, suggesting

fibrous dysplasia; however, differentiation from an ossifying fibroma was considered because of the presence of the tipping movement of the teeth (Fig. 4). On a three-dimensional (3D) image reconstructed using Osirix®, the dimensions of the tumor were 73 mm × 41 mm × 37 mm (Fig. 5). On the 3D image, the deformation of the mandible was significant, and this tumor was considered to be a central osteoma.

Magnetic resonance imaging (MRI) showed that a right mandibular bone mass showing high- and middle-low intensities was noted on T1WI (Fig. 6A) and T2WI (Fig. 6B), respectively. The inner intensity of the mass was similar to that of the surrounding cancellous bone; however, low- and high-intensity regions were partially noted on the buccal side on T1WI and T2WI, respectively, because ulceration and a soft tissue tumor were suspected as well.

Using bone scintigraphy, abnormal accumulations were noted in the body of the right mandible and the right sacroiliac joint (Fig. 7). The laboratory test showed no particular result (Table 1). The clinical diagnosis was a right mandibular tumor.



**Fig. 3.** Panoramic X-ray photograph on the first examination. No laterality was noted in the anatomical position of the mandibular canal or mental foramen.

Download English Version:

<https://daneshyari.com/en/article/2777175>

Download Persian Version:

<https://daneshyari.com/article/2777175>

[Daneshyari.com](https://daneshyari.com)