



## Case Report

## Large odontogenic mixofibroma of the mandible excised without visible scar: A case report



Hitoshi Sato<sup>a,b</sup>, Seiji Asoda<sup>a,\*</sup>, Wataru Muraoka<sup>c</sup>, Momoko Yoshikawa<sup>c</sup>, Takazumi Yasui<sup>d</sup>, Nobuyuki Horie<sup>a</sup>, Katsuhiko Onizawa<sup>d</sup>, Taneaki Nakagawa<sup>a</sup>, Hiromasa Kawana<sup>a</sup>

<sup>a</sup> Division of Oral and Maxillofacial Surgery, Department of Dentistry and Oral Surgery, School of Medicine, Keio University, Tokyo, Japan

<sup>b</sup> Department of Oral and Maxillofacial Surgery, School of Dentistry, Showa University, Tokyo, Japan

<sup>c</sup> Department of Dentistry & Oral surgery, Kawasaki Municipal Ida Hospital, Kanagawa, Japan

<sup>d</sup> Department of Dentistry & Oral surgery, Kawasaki Municipal Kawasaki Hospital, Kanagawa, Japan

## ARTICLE INFO

## Keywords:

Mandibular tumour  
Modified pre-auricular-temporal approach  
Transoral approach  
Odontogenic myxofibroma

## ABSTRACT

Combination of a pre-auricular-temporal approach and zygomatic osteotomy is a useful surgical approach for major temporomandibular joint tumours; however, additional approaches may be required to remove tumours expanding under the basal part of the condyle. We describe a patient with a large odontogenic myxofibroma of the basal part of condyle that was excised by a combination of pre-auricular-temporal approach with resection of the zygomatic arch and transoral approach. A 22-year-old man was referred to our department with a painless swelling in the left preauricular area. There was a palpable mass around his left condyle. Computed tomography revealed an infiltrative mass that had expanded to the vicinity of the impacted third molar root apex. The patient had strong cosmetic requirements, and we therefore adopted a combination of pre-auricular-temporal approach with zygomatic osteotomy and transoral approach for resection of the tumour. There was minimal intraoperative bleeding, and no sensory loss in the area innervated by the facial nerve. Histopathological analysis of the excised tumour revealed odontogenic myxofibroma. The scar was located in an inconspicuous area that could be hidden by his hair and in the oral cavity. There were no signs of recurrence or neoplastic transformation 7 years after surgical intervention.

## 1. Introduction

The surgical approach with resection of the zygoma represents a useful for accessing deep-seated temporomandibular joint (TMJ) or skull-base lesions [1,2], because zygomatic osteotomy provides easy access to the infratemporal fossa via the transcranial route [3–7]. However, other approaches (lateral, anterior, or transoral approach) may need to be added according to the tumour location, size, and type [8]. In particular, additional mandibular osteotomy would be necessary for excision of large temporomandibular tumours, and the transoral approach is useful for preventing damage to the facial nerve [9]. We describe a patient with a large odontogenic myxofibroma of the basal part of condyle that was excised with the minimum cosmetic and functional complications by a combination of pre-auricular-temporal approach with resection of the zygomatic arch and transoral approach.

## 2. Case report

A 22-year-old man with a several-year history of a painless swelling in the left preauricular area was admitted to the Department of Dentistry & Oral Surgery, School of Medicine, Keio University. There was no history of trauma to the maxillomandibular region. He had been referred by another hospital for further examination of a large radiolucent area in his left mandible on panoramic dental radiograph (Fig. 1).

Our clinical examinations revealed an asymmetrical face with a bulge in the left preauricular area (Fig. 2A). There was no limitation of jaw movements and his maximal incisal opening was 47 mm. There was a palpable mass (30 × 30 mm) around his left condyle (Fig. 2B). He had no heightened sensitivity to palpation around the tumour and no occlusal changes. Computed tomography scanning revealed a low-density

\* Corresponding author at: Division of Oral and Maxillofacial Surgery, Department of Dentistry and Oral Surgery, School of Medicine, Keio University, 35 Shinanomachi, Shinjyuku-ku, Tokyo 160-0016, Japan.

E-mail address: [asoda@keio.jp](mailto:asoda@keio.jp) (S. Asoda).

<https://doi.org/10.1016/j.ajoms.2018.02.002>

Received 5 October 2017; Received in revised form 7 January 2018; Accepted 3 February 2018

Available online 07 March 2018

2212-5558/ © 2018 Asian AOMS, ASOMP, JSOP, JSOMS, JSOM, and JAMI. Published by Elsevier Ltd All rights reserved.



Fig. 1. Panoramic radiograph. The left mandibular condyle containing a well-demarcated, resorptive mass.



Fig. 2. Facial observation. A, Asymmetrical face with bulge in the left preauricular area. B, No evidence of limited mouth opening.

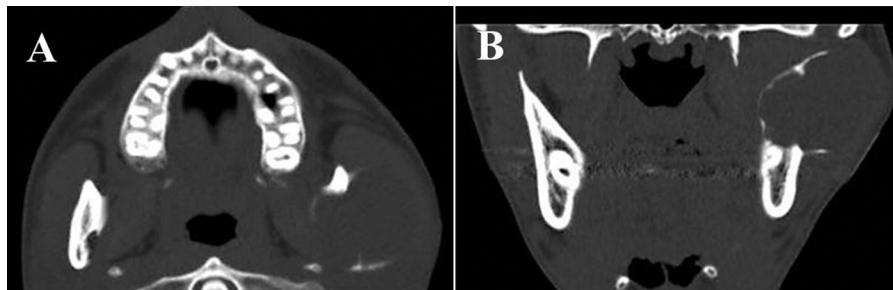


Fig. 3. Computed tomography scan. A, Axial view demonstrating a bony cystic lesion in the temporomandibular joint and mandibular fossa of the temporal bone. B, Coronal scan also showing bony cystic lesion with extension inferior to the impacted third molar tooth.

mass indicating thinning of the cortical bone of the left condyle (Fig. 3A). The mass had expanded to the vicinity of the impacted third molar root apex (Fig. 3B). Magnetic resonance imaging (MRI) revealed a homogeneous mass with low intensity on T1-weighted MRI and moderate intensity on T2-weighted MRI (Fig. 4A). It also showed gadolinium enhancement on T1-weighted MRI (Fig. 4B). There was no evidence of intracranial extension of the tumour. Fine-needle aspiration biopsy of the mass has been performed and the result revealed class I (no abnormal or unusual cells) in Papanicolaou stain. Three-dimensional models of the patient's skull were prepared (Fig. 5A) and a model surgical operation was performed to determine the appropriate lines of osteotomy (Fig. 5B).

The patient underwent tumour resection under general anaesthesia in February 2010. A cranio-temporal incision was performed according to the modified pre-auricular-temporal approach (Fig. 6A). A single flap with the temporalis, masseter, and zygomatic major and minor muscles was turned at the temporal muscle insertion (Fig. 6B). Zygomatic arch resection was performed to make the tumour visible, but this was insufficient to gain access to the bony mass on the inferior aspect of the mandibular ramus. An additional transoral approach (Fig. 6C) was therefore performed to gain appropriate access to the inferior aspect of the mandibular ramus. The line of mandibular osteotomy was designed parallel to the occlusal plane at the same height as the occlusal surface of the mandibular second molar teeth, and the bony mass was removed

Download English Version:

<https://daneshyari.com/en/article/8700584>

Download Persian Version:

<https://daneshyari.com/article/8700584>

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