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## Three cases of myxofibroma.

Katsumi Nishijima\*

Shunichiro Nagahata†

Yoshimitsu Okamoto‡

Kenichiro Maeda\*\*

Yoshikumi Inoue††

Kazuyoshi Matsumura‡‡

Makoto Tohdoh§

Kumiko Masuhira¶

\*Okayama University,

†Okayama University,

‡Okayama University,

\*\*Okayama University,

††Okayama University,

‡‡Okayama University,

§Okayama University,

¶Okayama University,

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Katsumi Nishijima, Shunichiro Nagahata, Yoshimitsu Okamoto, Kenichiro Maeda, Yoshikumi Inoue, Kazuyoshi Matsumura, Makoto Tohdoh, and Kumiko Masuhira

## Abstract

Myxofibroma is a rare tumor. Three cases of myxofibroma, each of which developed at the right mandibular ramus, mandibular anterior tooth region, are presented. Myxofibroma developing in the mandibular ramus region is rare, and there has been only one case reported so far in Japan.

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— BRIEF NOTE —

**THREE CASES OF MYXOFIBROMA**

Katsumi NISHIJIMA, Shunichiro NAGAHATA, Yoshimitsu OKAMOTO,  
Kenichiro MAEDA, Yoshikuni INOUE, Kazuyoshi MATSUMURA,  
Makoto TOHDOH and Kumiko MASUHIRA

*Department of Oral Surgery, Okayama University Medical School,  
Okayama 700, Japan (Director: Prof. K. Nishijima)*

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*Abstract.* Myxofibroma is a rare tumor. Three cases of myxofibroma, each of which developed at the right mandibular ramus, mandibular anterior tooth region, are presented. Myxofibroma developing in the mandibular ramus region is rare, and there has been only one case reported so far in Japan.

Myxofibroma that occurs in the jaw bone is rare. Zimmerman and Dahlin (1) reported 26 cases in 50 years, Suzuki (2) 13 cases in 25 years, Ishikawa and Akiyoshi (3) 20 cases within about 30 years, and Nishijima *et al.* (4) reported 26 cases in the period of 11 years from 1965 to 1975. Three cases of myxofibroma seen recently, one of the right mandibular ramus region and two in the mandibular anterior tooth region, are presented.

*Case Presentation. Case 1.* The patient was a 34-year-old female of average physical and nutritional condition. About one month earlier at the time of a visit to a dentist for treatment of dental caries on 6 tooth, an abnormality in the right mandibular ramus was pointed out. Examination failed to discover any abnormality of the oral cavity, either internally or externally. X-ray findings (Fig. 1) revealed a multilocular, radiolucent lesion as big as a walnut with a distinct boundary located in the center of the right mandibular ramus. An ameloblastoma was suspected so hemimandibulectomy was performed with an approach from posterior of 7. Pathohistological findings (Fig. 2) of the operative specimen showed stellate or spindle-shaped, slender cells without dysplasia in a mucus-like or edematous stroma. These cells were arranged in a palisade formation accompanied by collagen fibers.

*Case 2.* The patient was a 26-year-old female of moderate physical and nutritional condition. About 8 months earlier she noticed a tumor of thumb-tip size at the median mandibular labial side with a separation of the teeth between 11 teeth. In the oral cavity an elastic hard tumor mass of a hen's egg size with

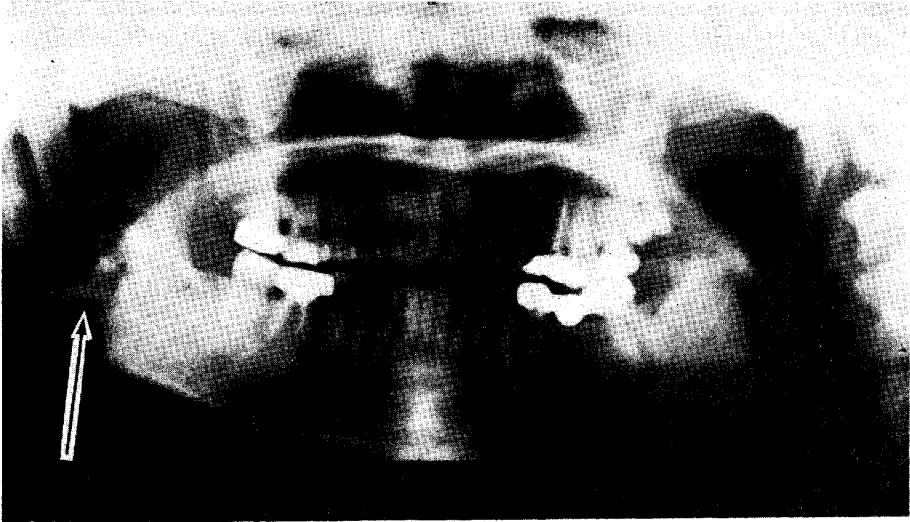


Fig. 1. X-ray of a radiolucent lesion with a distinct boundary in the center of the right mandibular ramus.

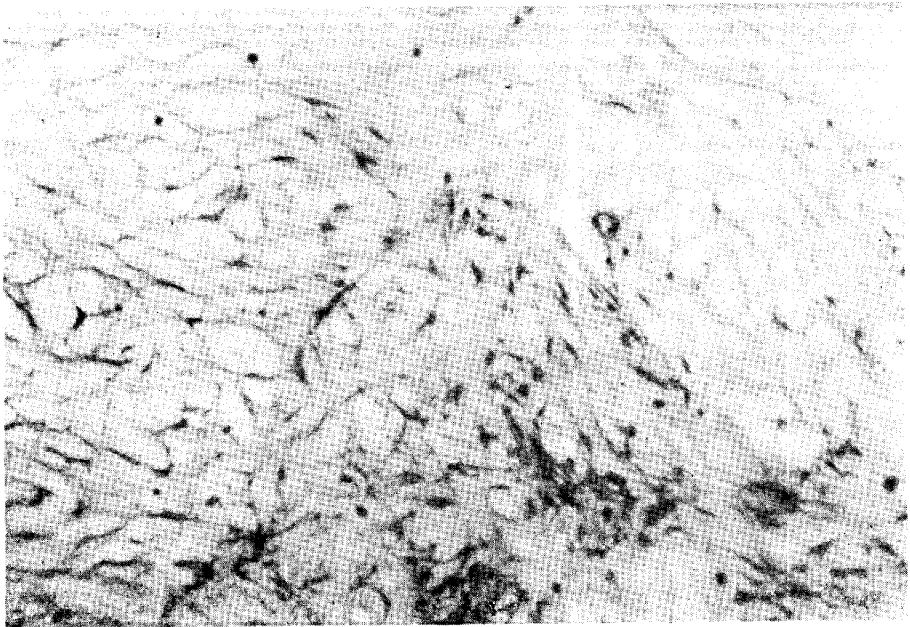


Fig. 2. The tumor in Fig. 1 shows stellate or spindle shaped, slender cells without dysplasia. H-E stain,  $\times 100$ .

a distinct boundary was found at the  $\overline{4+4}$  region. X-ray findings (Fig. 3) disclosed bone absorption with a clearcut boundary which resembled a cyst. The

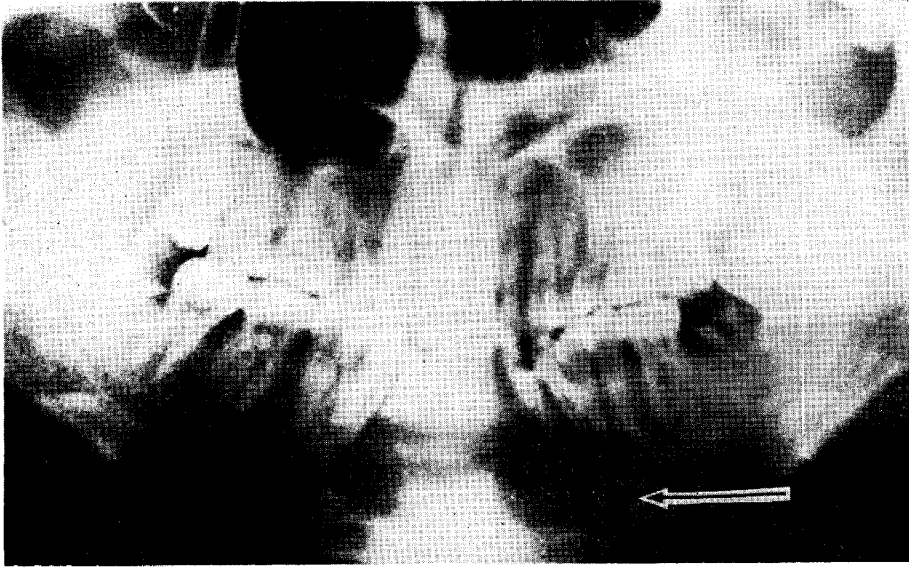


Fig. 3. X-ray of bone absorption with a clearcut boundary which resembled a cyst and extended from the alveolar bone of the  $\overline{4+5}$  region to the jaw bone.

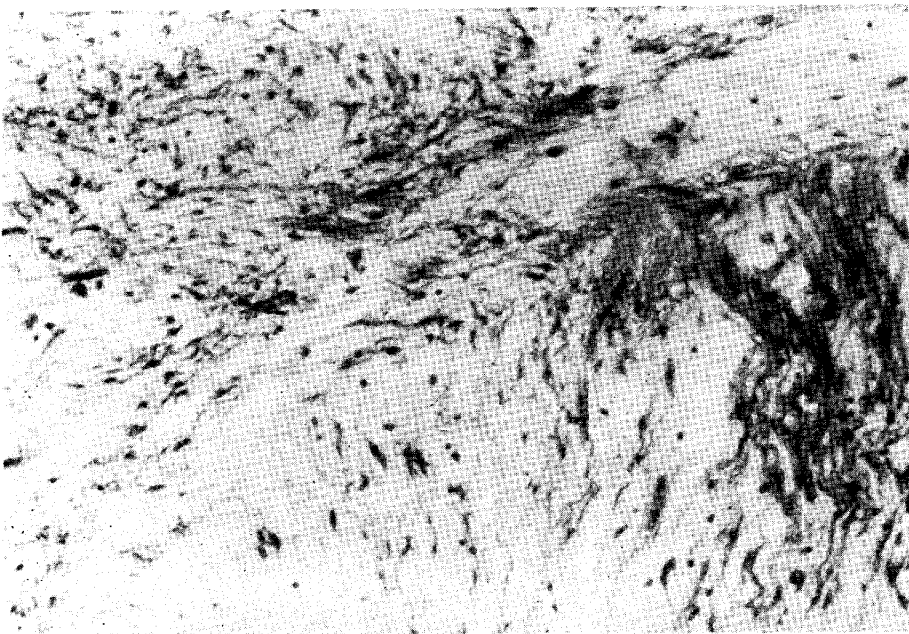


Fig. 4. The tumor in Fig. 3 shows coarse proliferation of slender, spindle-shaped fibroblasts. H-E stain,  $\times 100$ .

lesion extended from the alveolar bone of the  $\overline{4+5}$  region to the jaw bone. Within the cyst there was an arborizing radiolucency suggesting multilocularity.

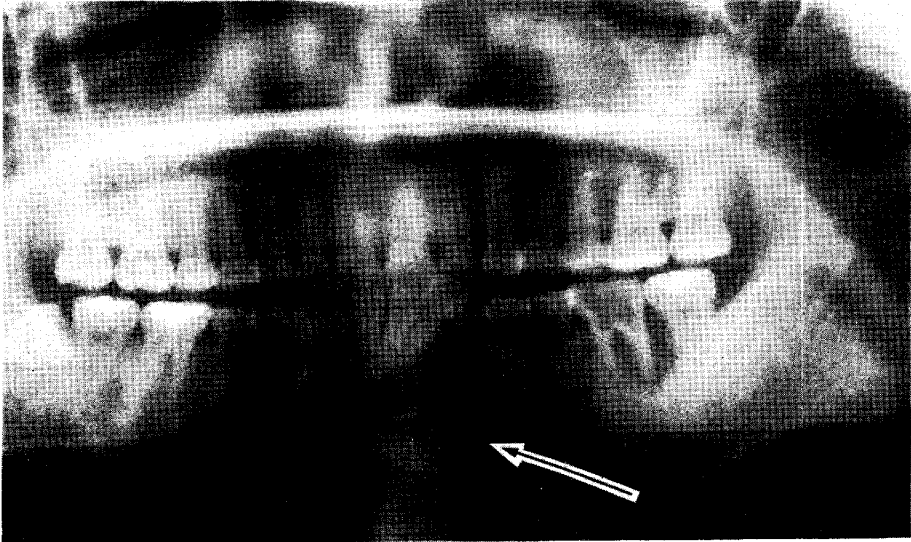


Fig. 5. X-ray of ovoid bone absorption with a distinct boundary in the area from 1 root apex to 3 root apex. Indistinct small crevices exist in places.

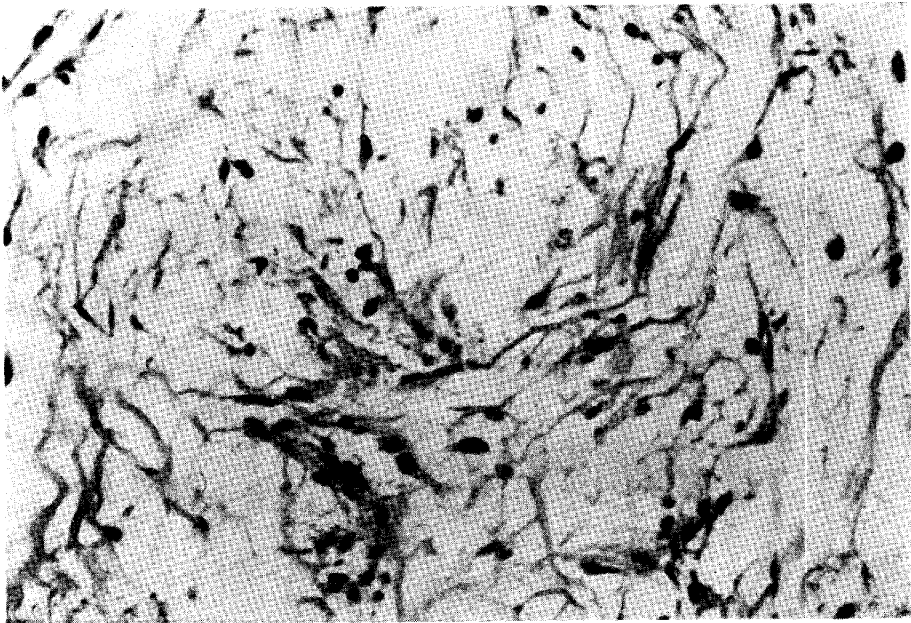


Fig. 6. The tumor in Fig. 5 consisted of spindle-shaped and stellate cells in an irregular arrangement with fine cellular processes. H-E stain,  $\times 100$ .

A clinical diagnosis of myxofibroma was made and the tumor including the  $\overline{4+5}$  teeth were excised. The tumor measured  $4.0 \times 3.0 \times 3.0$  cm in size, and pathohistologically (Fig. 4), consisted of a coarse proliferation of slender, spindle shaped fibroblasts with abundant mucinous substance between cells.

*Case 3.* The patient was a 28-year-old female with moderate physical condition and mild facial pallor. She had a light spontaneous pain at the  $\overline{12}$  region during the previous 3 months. Clinical examination indicated a decrease in serum iron. X-ray findings (Fig. 5) showed an ovoid bone absorption with a distinct boundary in the area from  $\overline{1}$  root apex to  $\overline{3}$  root apex with indistinct small crevice in places. A clinical diagnosis of odontogenic fibroma was made and the tumor at the  $\overline{1+3}$  region along with the teeth and surrounding bone were excised en masse. The tumor measured  $2.0 \times 1.8 \times 1.8$  cm and contained spindle-shaped and stellate cells in an irregular arrangement with fine cellular processes (Fig. 6). The postoperative course in each of the three cases has been favorable, and there have been no recurrences so far.

#### DISCUSSION

Three cases of myxofibroma are presented. During the 13 years from January 1965 to December 1977, only one case (5) has been reported in Japan of myxofibroma developing at the mandibular ramus region as our case 1. Such a site, therefore, is a rare as the origin of this tumor.

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