

Carcinoma of the Mandible

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Abstract: A 47 male patient came to IbnElhytham Hospital Khartoum Sudan, suffering from huge mandible swelling in the left side. The dentist requested CT facial bones.

Keywords: Ca, CT, 3D.

INTRODUCTION

The jaw (an unusual site of primary tumors in children and adolescents) has lesions often found incidentally by dentists on routine panoramic radiographs or during examination of a child who has swelling or tooth pain.

Ca Mandible

Primary intraosseous carcinoma describes a squamous cell carcinoma arising primarily from the jaw bone having no initial connection with oral mucosa, and presumably developing from residues of the odontogenic epithelium [1]. It may arise within the jaws either from a previous odontogenic cyst or de novo rather than from a pre-existing epithelial lesion [2]. Several cases of malignant transformation of odontogenic cysts or odontogenic tumors have appeared in the literature, while primary intraosseous carcinoma arising de novo has been infrequently reported. Here, we report a case of primary intraosseous carcinoma in a middle aged female patient with gross destruction of hemimandible with local metastasis [2].

CASE REPORT

A 47 male patient came to IbnElhytham Hospital Khartoum suffering from huge mandible

swelling in the left side. The dentist requested CT facial bones. The CT showed there was a bony mass in the Left side of the mandible as shown in the figures 1, 2, 3.



Fig-1: Coronal soft tissue window CT image



Fig-2: Coronal bony window CT image



Fig-3:3D CT image

DISCUSSION

The total number of reported cases of Primary intraosseous carcinoma [PIOC] is difficult to determine owing to insufficient data to conclusively support the diagnosis of some published cases. Approximately more than 150 cases of PIOC have been documented till now; consisting of more than 90 cases of PIOC type 1 and rest are PIOC type 3 [3]. Present case falls in the category of type 3 as it meets all the criteria explained earlier. PIOC affects patients ranging from 4-90 years of age with mean age of 57 years. It is more frequently located in mandible with a striking predilection for posterior regions. In maxilla lesions are mainly located in the anterior region and cross the midline. It affects men more than women with different ratios given in several studies[1-4].

Many studies show that 61% of PIOC presented a unilocular radiolucency resembling cyst varying in size shape and margins. In most of cases margins are irregular and poorly defined. These did not cause root resorption or displacement and tend to grow around obstructions as teeth rather than displace them, since invasion probably occurs along the path of least resistance. Variability of radiographic features of PIOC and its resemblance to peri-apical lesions and radicular cysts, as well as other odontogenic cysts and tumors, emphasize that PIOC should be considered in the differential diagnosis of radiolucent lesions of jaws [3].

The metastatic spread of oral carcinoma is largely through the lymphatics to the ipsilateral cervical lymph nodes. Occasionally, contralateral or bilateral metastatic deposits are seen, and approximately 2% of patients have distant metastases at diagnosis [7].

REFERENCES

1. Kramer IR, Pindborg JJ, Shear M. Histological typing of odontogenic tumours. Springer Science & Business Media; 1992 Feb 6.
2. Chaisuparat R, Coletti D, Kolokythas A, Ord RA, Nikitakis NG. Primary intraosseous odontogenic carcinoma arising in an odontogenic cyst or de novo: a clinicopathologic study of six new cases. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*. 2006 Feb 28;101(2):194-200.
3. González-García R, Sastre-Pérez J, Nam-Cha SH, Muñoz-Guerra MF, Rodríguez-Campo FJ, Naval-Gías L. Primary intraosseous carcinomas of the jaws arising within an odontogenic cyst, ameloblastoma, and de novo: report of new cases with reconstruction considerations. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontology*. 2007 Feb 28;103(2):e29-33.
4. Thomas G, Pandey M, Mathew A, Abraham EK, Francis A, Somanathan T, Iype EM, Sebastian P, Nair MK. Primary intraosseous carcinoma of the jaw: pooled analysis of world literature and report

of two new cases. International journal of oral and maxillofacial surgery. 2001 Aug 1;30(4):349-55.

5. Waldron CA, Mustoe TA. Primary intraosseous carcinoma of the mandible with probable origin in an odontogenic cyst. Oral surgery, oral medicine, oral pathology. 1989 Jun 1;67(6):716-24.
6. Zwetyenga N, Pinsolle J, Rivel J, Majoufre-Lefebvre C, Faucher A, Pinsolle V. Primary intraosseous carcinoma of the jaws. Arch OtolaryngolHead Neck Surg. 2001;127:794-7.
7. Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and maxillofacial pathology, 1995. Philadelphia, WB Saunders Company.;625.