Case Report

An unusual case of progression of mandibular erosive lesion

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ABSTRACT

The erosive lesions of the mandible may be of odontogenic or non odontogenic origin and have different destructive capacity. The inflammatory lesions are usually associates with pain; where as destructive lesions may not show initial signs of pain. This report discusses a case report of a 35 year old female with complaints of pain in the right side of the face and radiographic differential diagnosis.

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1. Introduction

The erosive lesions of the mandible may be of odontogenic or non odontogenic origin and have different destructive capacity. The inflammatory lesions are usually associates with pain; where as destructive lesions may not show initial signs of pain. The age of patient, content of lesion, extension and expansile nature of the lesions all will contribute to diagnostic consideration factors. The progression of the lesion sometimes may be very aggressive which may rapidly change radiological appearance of the lesion.

2. Case Report

A 35 year old woman reported to department of Oral Medicine with complaints of pain in the right side of the face. The presentation of the pain was sharp, intermittent and spikes on stimulation which was mimicking to neuralgic type. History revealed that patient was under medication for neuralgia since two weeks. Intra oral examination revealed mild expansion of buccal cortex in lower right posterior teeth region. The extra oral examination revealed a diffuse swelling on the right angle of the mandibular region. The swelling was tender and it accentuates on palpation even on slight touch (Figures 1 and 2). The pattern of pain would mimic to neuralgia but the presence of the swelling was the diagnostic riddle.

CBCT revealed destructive area on right posterior area of the mandible. The buccal cortex was lost with the hypodense area of irregular bony erosions in the molar area extending deep up to the mandibular canal (Figure 3). The radiographic features were suggestive towards a aggressive lesion and the association of the pain would suggest ourselves as an inflammation or osteolytic lesion. It was decided to surgically explore the lesion. The exploration revealed extensive presence of granulation tissue in the lesion site. The whole region was curettage and the specimen was send for biopsy.

3. Discussion

Lesions which occur in maxillofacial region especially maxilla and mandible is quite challenging to diagnose...
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tumor, osteomyelitis, and even a malignant tumor. Most of the lesions showed ill-defined osteolysis with adjacent sclerotic changes on panoramic radiographs. In the present study, we analyzed CBCT images of gnathic LCH. The image shows an expansile lesion with periosteal new bone formation, bony erosions, sclerosis of adjacent bone, fluid attenuation within the lesion. Aggressive lesion presents as areas of multiple irregular bony destruction with non corticated border involving buccal and lingual cortical plates. The histopathologic features of LCH includes, a variable number of eosinophils, neutrophils, plasma cells, lymphocytes, and multinucleated giant cells are observed in LCH lesions. To distinguish LCH from other inflammatory lesions, lesional Langerhans cells need to be identified using immunohistochemical staining of CD1a or CD-207. Considering the major symptoms of LCH are swelling and pain, the differential diagnosis of LCH from osteomyelitis might be even more difficult. The differential diagnosis for osteolytic lesions of the jaw with surrounding inflammatory changes should include LCH.

4. Contribution

This work was carried out in collaboration among all authors. Authors AP and PS conducted the clinical procedures of the study and prepared the manuscript. Authors RVP, VKM and LKC assisted in clinical procedures and prepared the primary draft of the manuscript. Authors PS and AP conducted the radiological investigation and gathered evidence for the treatment plan.

5. Conflict of Interest

The authors have stated explicitly that there are no conflicts of interest in connection with this article.

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None

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