

Short Communication

A rare case of mandibular osteosarcoma with myxoid pattern

Osteosarcomas are defined as primary malignant tumors of the long bones with varied histological patterns. Conventional osteosarcoma can be subdivided into osteoblastic, chondroblastic, and fibroblastic histologic variants depending on the extracellular matrix produced by the tumor cells.¹ Other evident histologic variants are the telangiectatic type, small cell, giant cell rich, large cell type, fibrous histiocytoma-type, and epithelioid osteosarcoma.² We present a case of Osteosarcoma with prominent areas of myxoid degeneration, although myxoid areas have been documented in chondrosarcoma and chondroblastic osteosarcoma but the present case is unique because it was devoid of any chondroid tissue formation and it showed a prominent myxoid stroma. An exhaustive literature review could only reveal a single case of jaw osteosarcoma with a prominent myxoid stroma.³

A 42 year old male presented to the Department of Oral Medicine and Radiology with the chief complaint of pain and swelling in lower, front region of his jaw since 6 months. . Extra – oral examination revealed a noticeable facial asymmetry on the right side of the face. Intra–oral examination revealed a large swelling extending from tooth #41 to the ramus of the mandible measuring about 5×4cm antero–posteriorly and medio – distally. On palpation it was found to be hard and fixed to the underlying structure. The overlying mucosa varied in color from yellowish to reddish. The cervical lymph nodes were hard and painful on palpation. OPG revealed a mixed radiopaque–radiolucent area extending from #33 to #43 (**Figure 1**). An

incisional biopsy was taken and tissue was sent to the Department of Oral and Maxillofacial pathology for histopathological evaluation.

Histopathological examination revealed numerous malignant osteoblasts with neoplastic bone formation at places (**Figure 2**). Connective tissue stroma was prominently myxoid and made up of haphazardly arranged spindle shaped fibroblasts (**Figure 3**). A final diagnosis of myxoid osteosarcoma rendered.



Figure 1 Orthopantomograph reveals a mixed radiopaque-radiolucent lesion of the anterior mandible.

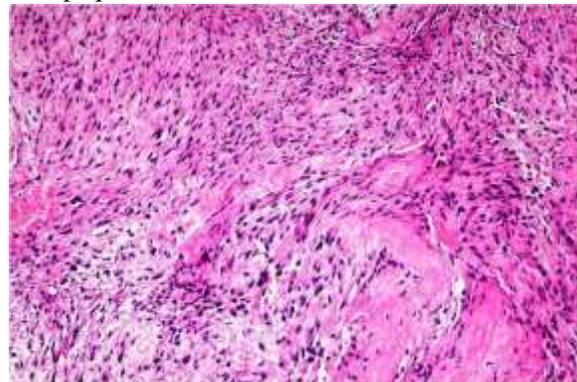


Figure 2 Malignant osteoblasts with neoplastic bone formation at places (Hematoxylin and Eosin staining X40).

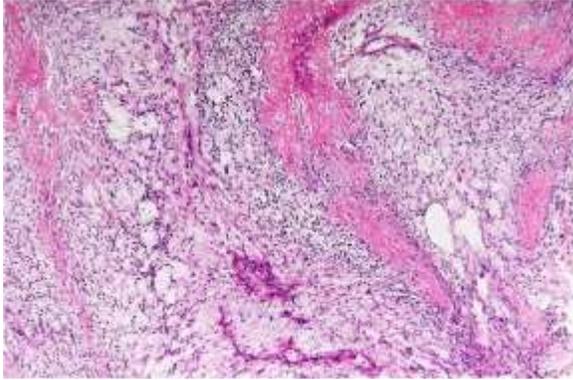


Figure 3 Connective tissue stroma revealed numerous spindle shaped cells fibroblasts with areas of neoplastic bone formation in a prominently myxoid background. (Hematoxylin and Eosin staining X20).

References

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