Extended Abstract

Ameloblastic Fibrosarcoma: Report of a New Case [†]

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Ameloblastic fibrosarcoma (AFS) is defined as a malignant mesenchymal tumor in which the epithelial component is cytologically benign and the mesenchymal component shows cytological features of malignancy [1]. AFS is the most common subtype of odontogenic sarcomas and is considered to be the malignant counterpart of fibromas of odontogenic origin [2].

AFS can occur in patients of any age, with more frequent manifestations in the third decade, predominantly male (M:F ratio of 1.5). Histologically, stromal component of AFS is characterized by malignant features of sarcoma.

Clinically, AFS grows progressively, resulting painful in many cases and causing dysesthesia or paresthesia when it involves the nerves. The non-specific symptomatology makes diagnosis difficult. AFS always appears as a radiolucent lesion with irregular margins, mainly located in the mandible. Although treatment is predominantly surgical, recurrence and metastasis rates are high.

A 55-year-old patient was reported for the evaluation of a worsening swelling from right mandibular area accompanied by pain on palpation.

Palpation revealed a non-tender, non-fluctuant and hard swelling. The neck was soft with no evidence of lymphadenopathy or tenderness. Radiographic examination was conducted using panoramic radiograph and Cone Beam Computed Tomography (CBCT), revealing a radiolucent lesion on the left mandible, closely associated with the element 4.5 and the mandibular canal.

Under general anesthesia a mucoperiosteal flap was conducted in vestibular surface of right mandibula from 4.7 area to 3.2. Using piezoelectric bone scalpel. Osteotomy was performed and the lesion were enucleated.

Histopathology showed malignant features of sarcoma, such as nuclear crowding, with hypercellularity and variable degrees of cytological atypia. On the contrary, the odontogenic epithelial component is bland and cytologically benign. The histopathological features suggested diagnosis of AFS.

A new resection, after planning on stereolithographic models, was necessary for the extension of the surgical margins and to reduce the risk of recurrence, with the colleagues of the Sant'Orsola hospital in Bologna. Post operation period was favorable for the patient.

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References

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