Calculating epithelial odontogenic tumor of the maxilla

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CASE REPORT

Calcifying epithelial odontogenic tumor of the maxilla

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INTRODUCTION

The calcifying epithelial odontogenic tumor (CEOT) is a rare benign neoplasm; it comprises only 0.6% to 1.7% of all odontogenic tumors.1-4 Most cases involve the posterior mandible; there have been few reported maxillary cases.2-5 Although its biological behavior is relatively indolent, maxillary lesions tend to grow rapidly and not be circumscribed.1 Treatment of the CEOT consists of surgical removal, ranging from a conservative approach to the mandible; few cases have been reported in the maxilla. In this site, the CEOT tends to grow more rapidly and not be circumscribed, suggesting that more aggressive surgery is required in these specific cases.

One of the typical findings of intraosseous CEOT is the presence of mineral deposits, commonly in the form of Liesegang’s rings; extraosseous forms generally do not exhibit these deposits. A paucity of mineral deposits and a maxillary site are the particularities of this case.

DISCUSSION

CEOT is a rare benign epithelial odontogenic neoplasm; its prevalence ranges from 0.6% to 1.7% of all odontogenic tumors.1-4 This report adds to the small number of maxillary CEOT cases reported in the maxilla, since over 2/3 of CEOT case have been described in the posterior portion of the mandible.1-5

Two marked microscopic features were identified in this case: a significant amyloid-like deposit, and sparse mineral deposits with inconspicuous Liesegang’s rings. Although there were few mineral deposits in the tumor stroma, this case was not classified among the rare non-mineralized variants of Pindborg’s tumor.5,6 Furthermore, a relative absence of mineralized areas has been described as typical of peripheral CEOT variants.1-2

Treatment of CEOT consists of surgical removal, which includes a marginal portion of apparently healthy bone. A minimum 3-year observation period is suggested.1-5 Maxillary CEOT cases require more aggressive surgery, since these tumors tend to grow more rapidly and are not circumscribed.1

Notwithstanding its size and a relatively rapid clinical progression, which suggest a distinct biological behavior of this tumor in the maxilla, conservative surgery including a non-involved marginal bone area was undertaken in this case. After one year there are no signs of relapse; the patient, however, remains under observation, given the possibility of recurrence within the first five years of surgery.

FINAL COMMENTS

CEOT is a rare epithelial odontogenic tumor with a marked preference for the mandible; few cases have been reported in the maxilla. In this site, the CEOT tends to grow more rapidly and not be circumscribed, suggesting that more aggressive surgery is required in these specific cases.

REFERENCES


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