LETTER TO THE EDITOR

Critical evaluation of the radiological and clinical features of adenomatoid odontogenic tumour

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In reference to the article “Critical evaluation of the radiological and clinical features of adenomatoid odontogenic tumour”,¹ we would like to congratulate the authors for an excellent critical evaluation. The authors took great effort in evaluating multiple factors for clinical and radiological features of adenomatoid odontogenic tumour (AOT). We wish to address certain aspects of the radiographic features of AOT not presented in the article.

It is important to note that there are many radiographic variants of AOT which should have been included in the radiological analysis, as well as in the discussion, by the authors. The benign (hamartomatous) non-invasive AOT occurs in three clinicotopographic variants: (1) follicular, (2) extrafollicular and (3) peripheral. The follicular and extrafollicular variants are intrabony or central tumours and account for 97% of all AOTs, of which 73% are of the follicular type.² The extrafollicular variety has four different manifestations on radiographs, which can be regarded as E_1 – E_4 [E_1 , without relation to tooth structures either erupted or unerupted; E_2 , inter-radicular, adjacent roots diverge apically as a result of tumour expansion (mimicking a globulomaxillary cyst); E_3 , superimposed on the root at the apex level (mimicking a radicular cyst) and E_4 , superimposed at the mid-root level].²

The differential diagnoses of radiolucencies that occur in the maxilla and mandible include a broad spectrum of cysts and tumours of odontogenic and non-odontogenic origin. Many can be diagnosed accurately based on the distinctive clinical, radiographic and histopathological

aspects.³ The radiographic findings of AOT frequently resemble other odontogenic lesions, such as dentigerous cysts, calcifying odontogenic cysts, calcifying odontogenic tumours, globulomaxillary cysts, ameloblastomas, odontogenic keratocysts and periapical disease.⁴ AOT can mimic globulomaxillary cysts and periapical cysts (radicular cysts);^{2,4–7} both of these cysts should have been included in the differential diagnosis mentioned in the article.

In addition, the authors have used radiological data of density, expansion, borders, locularity, size and impact on adjacent teeth to evaluate their cases, but the radiological views used by them for evaluation need to be mentioned. This is important to avoid confusion, as the authors have stated that panoramic radiography is often unable to demonstrate radio-opacities when calcification is minimal and intraoral radiography may be essential for correct radiographic interpretation of an AOT in the presence of minimal quantities of calcified deposits. Furthermore, one article stated that MRI can be useful to distinguish AOT from other lesions, even if it is difficult using periapical ordinal radiography.⁴

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