Reviewer’s report

Title: Adenomatoid odontogenic tumor associated with odontoma: A case report and critical review of the literature

Version: 1 Date: 2 August 2013

Reviewer: Fumio Ide

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Minor essential revisions

Level of interest: An article of limited interest

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:

This is a relatively well-written case report of the so-called “hybrid” or "combined" odontogenic lesion. It will be a valuable contribution to the literature, in my opinion. I have a few comments.

Major:

1. It is advisable for the authors to discuss in depth whether this type of lesion represents an adenomatoid odontogenic tumor (AOT) with odontogenesis or a kind of developing odontoma with AOT-like areas. Minor microscopic foci resembling AOT (duct-like) structures have been reported in a wide variety of odontoma-producing lesions, e.g., mature odontoma (Takeda, JOPM 1991: 20: 184), calcifying cystic odontogenic tumor (Freedman et al. OS OM OP 1975: 40: 93; Hong et al. OS OM OP 1991: 72: 56; Zeitoun et al. JOMS 1996: 54: 634; Lukinmaa et al. JOPM 1997: 26: 265; Lin et al. OS OM OP 2004: 98: 451; Phillips et al. JOMS 2010: 68: 470), odonto-ameloblastoma (Frissell and Shafer OS OM OP 1953: 6: 1129; Silva OS OM OP 1956: 9: 545; Jacobsohn and Quinn OS OM OP 1968: 26: 829; Orlovski et al. OS OM OP 1991: 72: 91), adenoid ameloblastoma with dentinoid (Matsumoto et al. JOPM 2001: 30: 251). None of these lesions including the present case showed a fully developed AOT. So, it is likely that AOT-like architecture forms part of the usual histomorphologic spectrum of odontogenic tumors.

2. From a clinicopathologic perspective, 4 cases of Allen et al. and a case of Cudney et al. should be excluded from Table 1. The former showed no evidence of amelogenesis and the latter could be better interpreted as a simple immature odontoma of pericoronal type.

Minor:

1. Figure 1A is not necessary.
2. Composite figure 2 is too small for proper recognition.

3. Scanning view of the whole-mount section would be more demonstrable.

In sum, whether the designation of AOT associated with odontoma (a potential variant of AOT) is truly justified would be worthy of debate.