Diagnostic criteria for unicystic ameloblastoma: ameloblastic versus ameloblastomatous epithelium

To the Editor:

Black et al. recently ably reviewed the diagnosis and treatment of ameloblastoma. In their Fig. 5, they illustrate histologic features of a putative “unicystic ameloblastoma.” Histologically, its obliquely sectioned columnar lining epithelium lacks ameloblastomatous features. That is, it lacks evidence of “reverse polarization”: Palisaded columnar cells with tall dark nuclei polarized away from the basement membrane by sub-nuclear clear cytoplasmic vacuoles are not observed. The lining epithelium additionally demonstrates small islands and cords of odontogenic epithelium budding into the connective tissue in a pattern not characteristically seen in ameloblastoma but typically observed in dental follicular tissue. In short, the ameloblastic epithelium illustrated in the authors’ Fig. 5 shows no evidence of ameloblastoma. The epithelial lining is ameloblastic but not ameloblastomatous, and dental follicular tissue appears to have been misinterpreted as unicystic ameloblastoma. The interpretation of histologic specimens is somewhat subjective, but I suspect that a panel of oral pathologists (for example, those of an editorial board) would invariably interpret tissue depicted in Fig. 5 as nonneoplastic odontogenic tissue.

If a pathologist were to encounter a gnathic cystic specimen evoking consideration of unicystic ameloblastoma, he or she might well consult the current literature to “match pictures,” to compare histologic features of test tissue to those of a published photomicrographic standard. If the pathologist were to use Fig. 5 as a model, the error could be perpetuated: Normal ameloblastic tissue could be misinterpreted as unicystic ameloblastoma. The recurrence rate of unicystic ameloblastoma is lower than that of conventional solid-multicystic ameloblastoma; hopefully, diagnostic error contributes little to this disparity.

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Response to Letter to the Editor: Diagnostic criteria for unicystic ameloblastoma: ameloblastic versus ameloblastomatous epithelium

In reply:

The photomicrograph of the lining of the unicystic ameloblastoma (our Fig. 5), that you doubt, is indeed

Fig. 1. Photograph taken from the same area of the cystic ameloblastoma specimen as in the original paper. The epithelium is artifically detached toward the left edge of the picture. This series of photos were taken in continuity in order to show how this bland epithelium can be misleading as to its ameloblastic origin, and how it is continuity with more diagnostic areas in this case (H&E stain; magnification x10).