



Correspondence

Response to Pilomatricoma (calcifying epithelioma): MDCT and MR imaging findings in 31 patients with radiological-pathological correlation


Dear Editors,

We read with interest the article by Dr. Yi and colleagues entitled “Pilomatricoma (calcifying epithelioma): multi-detector computed tomography (MDCT) and magnetic resonance (MR) imaging findings in 31 patients with radiological-pathological correlation” in the April 2018 issue of the *European Journal of Radiology* [1]. The authors concluded that the characteristic radiological findings of pilomatricomas included different calcification patterns on MDCT images and ring-like, reticular appearances and circular target sign on MR images. However, Fig. 2l and 2m of reference 1 present a serious question regarding the histopathological diagnosis. Although the second layer was identified as the shadow cells, it did not include any cellular architectures (asterisks in Fig. 2l of reference 1), which corresponded to a homogeneous eosinophilic material known as trichilemmal keratinization [2]. In addition, no epithelial cells were found in the third layer as described in the figure caption (white arrows in Fig. 2l of reference 1). This histopathological feature was consistent with cyst wall simply lined by stratified squamous epithelium without granular cell layer, which was characteristic of trichilemmal cyst [2]. Furthermore, the spindle cells in the outer layer, marked by black arrows in Fig. 2m of reference 1, were identified as inflammatory cell infiltration. However, the histopathological feature of the outer layer partly corresponded to that of the dermis; thus, these spindle cells could be normal dermal fibroblasts. Therefore, the histopathological features in Fig. 2l and 2m of reference 1 are highly suspicious of trichilemmal cyst.

In this paper, one patient had 11 lesions located in the same anatomic region (parietal scalp), which was identical to that in the case in Fig. 2 of reference 1. Generally, trichilemmal cysts are multiple in two-thirds and occur predominantly on the scalp in > 90% of cases. Therefore, the case in Fig. 2 of reference 1 is considered as multiple

trichilemmal cysts.

The authors described that the “circular target sign” on fat-suppressed T2-weighted images (FS-T2WI) was found in 4 out of 21 pilomatricoma lesions and has never been reported in previous literatures. However, all four lesions with circular target sign on FS-T2WI were found in the same patient (Fig. 2 and case 17 of reference 1). Therefore, we believe that the circular target sign on FS-T2WI could be a characteristic imaging feature of trichilemmal cyst.

In conclusion, this paper reported some interesting imaging features of pilomatricomas, but may include trichilemmal cysts. We believe that the histopathological diagnostic criteria of pilomatricomas should be clarified and all lesions should be re-evaluated by experienced pathologists.

Declaration of Competing Interest

There are no conflicts of interest.

References

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