Dear Editor,

The pathogenesis of thyroid lymphoepithelial cysts (LECs) is controversial, and two hypotheses have been proposed, including branchial-derived remnants [1] and follicular cells associated with Hashimoto’s thyroiditis [2]. Suzuki et al. previously reported that LECs originate from follicular cells, based on the immunohistochemical examination [2]. Recently, we encountered a patient with both multiple LECs and squamous metaplasia associated with Hashimoto’s thyroiditis. To support the latter hypothesis, we report the following case.

A 60-year-old female patient presented with multiple cystic lesions (Fig. 1A, 1B), with some lesions measuring as large as 52 mm in the thyroid. She underwent total thyroidectomy for bilateral papillary thyroid carcinoma. Microscopically, multiple LECs and squamous metaplasia were seen within the context of Hashimoto’s thyroiditis. Squamous metaplasia (Fig. 1C) showed an intraepithelial lymphocytic infiltration that appeared characteristic of LECs (Fig. 1D). Microscopic-sized squamous cell nests with cystic lesions revealed an intermediate form of squamous metaplasia and LECs (Fig. 1E, 1F).

Immunohistochemically, the LECs and the squamous metaplasia both show similar findings. Both squamous cells are positive for PAX8, TTF-1, and p63 [2] and 95.2% of the squamous metaplasia cases and 100% of LECs are associated with Hashimoto’s thyroiditis [2].

Here, we observed multiple squamous metaplasia, LECs, and their intermediate lesions within the context of Hashimoto’s thyroiditis. This indicates that the intermediate lesions are likely to represent a transition from squamous metaplasia that originated from follicular cells to LECs. Therefore, this case adds further support to the theory that thyroid LECs are derived from metaplastic follicular cells. However, the pathogenesis of LECs remains controversial.

Disclosure

None of the authors have any potential conflicts of interest associated with this research.
References
