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Pediatric Follicular Lymphoma: A Rare Variant

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Dear Editor:

Follicular lymphoma (FL) is extremely rare disease in the pediatrics[1]. Pediatric follicular lymphoma (PFL) is currently considered a variant of FL characterized by localized presentation and invariably benign behavior[2].

A 12-year-old boy presented with a 2-month history of an asymptomatic, 3×3 cm-sized, skin-colored subcutaneous mass on the right post auricular area (Fig. 1A). He was otherwise healthy. A punch biopsy was performed, and amorphous material was found at the subcutaneous level (Fig. 1B). For the more accurate diagnosis, complete excision of the observed mass was executed. Histopathological examination revealed that the excised mass was lymphoid tissue with effacement of nodal architecture, with even distribution of nodules and little interposed lymphoid tissue (Fig. 1C). The infiltrated cells were composed of relatively monomorphic atypical lymphoid cells with pleomorphic nuclei and prominent nucleoli (Fig. 1D). Immunohistochemically, the atypical lymphoid cells expressed CD20, CD10 (Fig. 1E) and bcl-6 (Fig. 1F), while CD3 and bcl-2 (Fig. 1G) were not found. The proliferation index seen on Ki-67 staining was ranging from 80% to 90% (Fig. 1H). The final diagnosis for this case was PFL, and there was no margin involvement.

PFLs should fulfill the histopathological criteria for FL in general. And immunophenotypically the germinal center B cells should express CD10 and bcl-6 but not bcl-2[3]. This case is of a patient with a CD3 (−), CD20 (+) specimen. In addition, the specimen was found to be CD10 (+), bcl-6 (+) and bcl-2 (−). It was sufficient to diagnose the patient with PFL. Yang et al.[3] analyzed 128 currently reported cases of PFL. Most occur in the lymph node of head. The majority of patients received chemotherapy. Most cases obtained complete remission (90.1%). Since the prognosis of PFL is better than FL, the physician must be meticulous in the diagnosis of FL with a negative bcl-2 finding. The rarity of PFL makes it difficult to formulate an evidence-based treatment protocol. So far, R-CHOP appears to be safe and effective; according to Kumar et al., 90.1% of the patients obtained complete remission[4]. In our case, complete excision was possible, so R-CHOP was not necessary. There was no evidence of recurrence at 6 month follow-up.

To our knowledge, PFL has never been reported in Korea. Herein, we report the first case of PFL in Korea, clinicians should keep in mind the possibility of PFL in a young patient showing abnormal lymph node enlargement. The study was approved by the Institutional Review Board of the Seoul St. Mary's Hospital (IRB no. KC17ZISE0059).

CONFLICT OF INTEREST

The authors have nothing to disclose.

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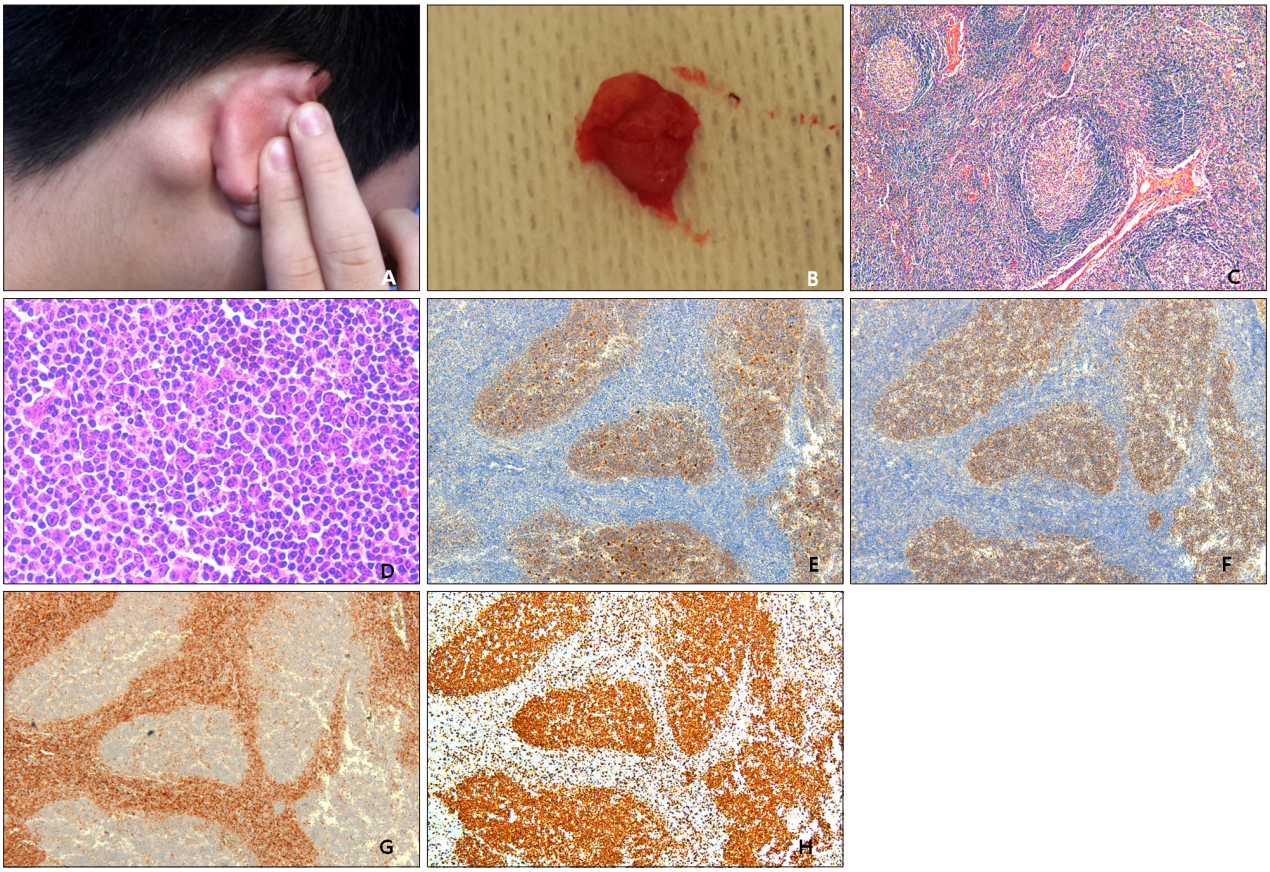

Fig. 1. (A) A 3×3 cm-sized, skin-colored subcutaneous mass. (B) An amorphous material at the subcutaneous level. (C) An excised tissue showed an effacement of nodal architecture (H&E, ×100). (D) Cytologically atypical, but relatively monomorphic lymphocytes in the neoplastic follicles (H&E, ×400). Immunohistochemically, (E) the atypical lymphoid cells expressed CD10 (×100) and (F) bcl-6 (×100), (G) while bcl-2 (×100) were not found. (H) The proliferation index seen on Ki-67 staining was ranging from 80% to 90% (×100).

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