

Extranodal Natural Killer/T-Cell Lymphoma, Nasal Type Involving Skin Masquerading as Eczema

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Dear Editor:

Extranodal natural killer (NK)/T-cell lymphoma, nasal type (ENKTL) is an uncommon type of lymphoma that is endemic to East Asia and parts of Central and South America¹. Most of the patients clinically present with nasal obstruction, sinusitis, ulcer, and epistaxis due to a destructive mass involving the midline facial tissues and skin is the second most commonly affected organ after nasal area¹. Descriptions of cutaneous manifestations of ENKTL are of well-circumscribed lesions such as nodules/tumors, plaques and ulcers. Other atypical, various clinical morphologies have been reported including papules, cysts, ulcers, and cellulitis². ENKTL presenting in the skin is highly aggressive with a mean survival of less than 12 months³. We report a case of extranodal NK/T-cell lymphoma, nasal type who presented with lesions clinically similar to

eczema.

A 63-year-old woman visited with pruritic erythematous papules and plaques with areas of postinflammatory hyperpigmentation on right upper back, left breast, and left thigh which persisted for 6 weeks (Fig. 1A~C). Under the clinical impression of eczema and urticarial dermatitis, she was treated with oral antihistamines and topical steroids ointment for 2 weeks. Despite treatment the lesions persisted and therefore skin biopsy was done on erythematous plaque of right upper back. Histopathologic findings revealed mixed atypical lymphoid cells and histiocytic cells along superficial and deep perivascular area (Fig. 2A). Lymphocytic infiltration showed perivascular pattern, with pale cytoplasm and dense chromatin with irregularly shaped nuclei (Fig. 2B). Immunohistochemical study showed CD3 and CD4 positivity in majority of lym-

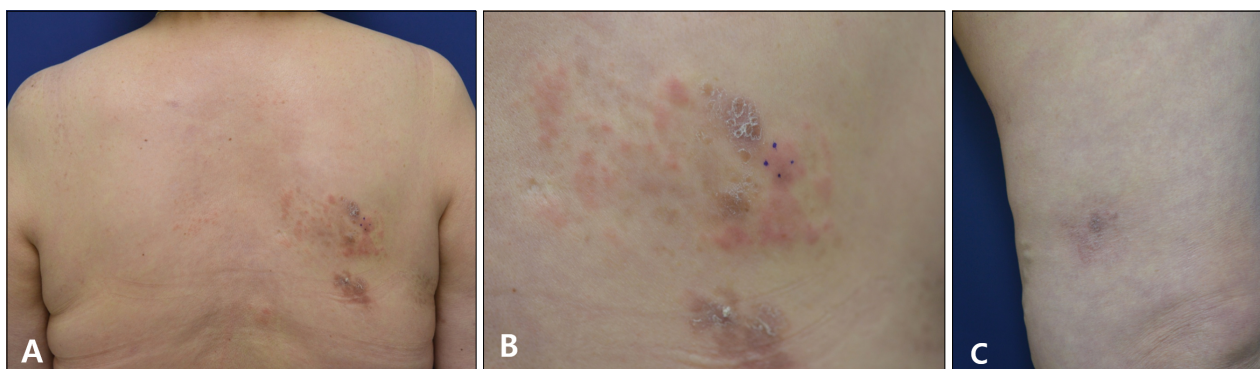


Fig. 1. Erythematous papules and plaques with areas of brownish hyperpigmentation on (A), (B) right upper back and (C) left thigh.

Received February 24, 2015, Revised May 14, 2015, Accepted for publication July 14, 2015

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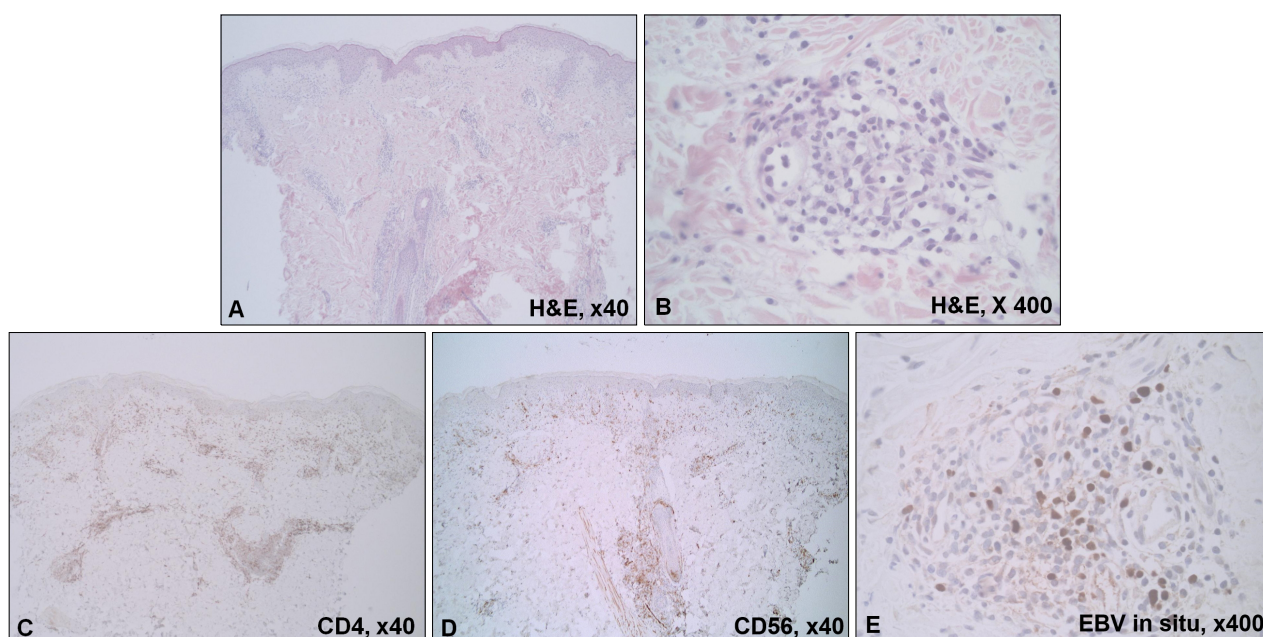


Fig. 2. (A) Mixed atypical lymphoid cells and histiocytic cells along superficial and deep perivascular area (H&E, $\times 40$). (B) Lymphocytic infiltration in perivascular pattern, with pale cytoplasm and dense chromatin with irregularly shaped nuclei (H&E, $\times 400$). (C) Immunohistochemical study showing CD4 positivity in majority of lymphoid cells (CD4, $\times 40$). (D) Immunohistochemical study showing CD56 positivity in interstitial, periadnexal lymphoid cells (CD56, $\times 40$). (E) Immunohistochemical study showing strong and profuse positivity in *in situ* hybridization for Epstein-Barr virus (EBV). Some of the EBV positive cells are invading vessel wall (red-arrows) (EBV *in situ*, $\times 400$).

phoid cells (Fig. 2C), focal positivity in CD8, CD30, CD56 (Fig. 2D) strong and profuse positivity in *in situ* hybridization for Epstein-Barr virus (EBV) (Fig. 2E). The patient was informed to visit immediately, however, did not visit within 2 weeks of notification. Five weeks after the initial visit the patient presented with left eye ptosis and swelling of left eyelid and mandibular area. Under the impression of extranodal NK/T-cell lymphoma, nasal type, the patient was transferred to hemato-oncology department.

The NK/T-cell lymphomas are classified into 2 subtypes, nasal and non-nasal NK/T-cell lymphomas. The non-nasal group can be further subdivided into primary cutaneous and 4 types of secondary cutaneous lymphomas: nasal-type, aggressive, blastoid, and other specific lymphoma types^{4,5}. Nasal-type NK/T-cell lymphoma is the most common subtype among the secondary cutaneous non-nasal NK/T-cell lymphomas⁵. The skin is the most common extranodal site of involvement followed by the soft tissues, and could be either primary or secondary feature of the disease³. The new sites of involvement are also mostly extranodal, and are similar to the predilection sites at presentation⁴. Extracutaneous involvement at the time of presentation is associated with worse prognosis³.

In a patient with known ENKTL, a skin biopsy should be obtained from any suspicious clinical lesion to assess for

possible cutaneous involvement. Furthermore, a simple erythematous patch may be the initial presenting manifestation of the disease. In conclusion, we report a case which stresses the importance of awareness of malignancy and prompt skin biopsy in patients with erythematous papules and plaques that fail to respond to traditional management.

ACKNOWLEDGMENT

The present research was conducted by the research fund of Dankook University in 2013.

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