Ann Dermatol Vol. 31, Suppl, 2019
pISSN 1013-9087 · eISSN 2005-3894
https://doi.org/10.5021/ad.2019.31.S.S14

BRIEF REPORT

Extranodal NK/T-Cell Lymphoma Mimicking an Infectious Granuloma

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Dear Editor:

Extranodal NK/T-cell lymphoma (ENTCL) is an uncommon form of systemic lymphoma with poor prognosis[1]. The skin is the second most common site involved, following the nasal cavity/nasopharynx[2]. Cutaneous lesions show variable clinical features such as erythematous papules, patches, abscess-like lesions, subcutaneous nodules, petechiae, and ulcers[2,3].

A 78-year-old male patient presented with a 2-month history of painful ulcerative plaques on his right arm (Fig. 1A) and variable-sized erythematous nodules with crust on his entire body. The large plaques on his arm were considered infectious granuloma or pyoderma gangrenosum based on clinical features and several bacterial cultures (isolated with *Enterococcus faecalis*, *Stenotrophomonas maltophilia*, and *Staphylococcus aureus*). Despite suscep-

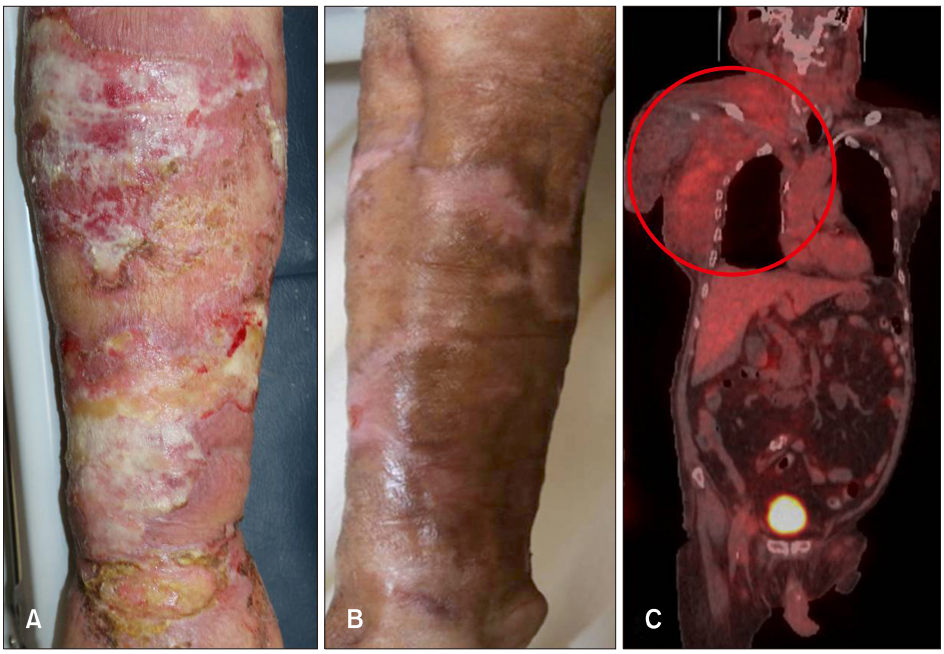

Fig. 1. (A) Painful erythematous ulcerative plaques with discharges on the right upper arm. (C) Lymphomatous involvement of the soft tissues of the right lower neck, shoulder, chest wall, and arm in positron emission tomography/computed tomography. (B) After VIDL chemotherapy (etoposide, ifosfamide, mesna, dexamethasone, and L-asparaginase), the ulcerative plaques on the patient's arm clinically improved after the 4th chemotherapy cycle.

Received October 10, 2018, Revised October 15, 2018, Accepted for publication October 18, 2018

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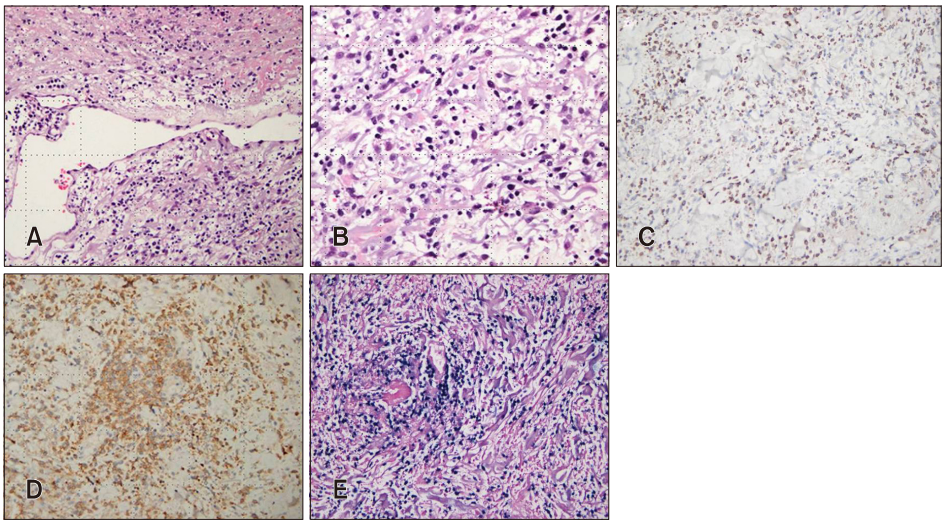

Fig. 2. (A, B) Histopathological examination showing dermal necrosis with dense atypical lymphoid cell infiltration. Vessel dilation and vascular destruction are also observed (H&E: A, ×100; B, ×200). (C) Immunophenotyping results revealed positive for CD3 (H&E, ×100), (D) CD56 (H&E, ×100) and (E) Epstein–Barr virus (H&E, ×100).

tible antibiotic treatment and dressing, high fever (>38°C) developed 2 to 3 times a day, and the skin lesions were unimproved. Skin biopsy of the ulcerative plaque was performed, and the histopathological examination revealed dermal necrosis with dense atypical lymphoid cell infiltration. Vessel dilation and vascular destruction were also observed (Fig. 2A, B). Immunophenotyping results were positive for cluster of differentiation CD3, CD30, CD56, and Epstein–Barr virus (EBV) and negative for CD20, CD34, CD4, and CD8 (Fig. 2C∼E). Neck computed tomography and whole-body 18-fluoro-2-deoxyglucose positron emission tomography scan revealed lymphomatous involvement of the soft tissues of the right lower neck, shoulder, arm, and chest wall, which was then diagnosed as ENTCL, stage IV (Fig. 1C). VIDL chemotherapy (etoposide, ifosfamide, mesna, dexamethasone, and L-asparaginase) was initiated, and the ulcerative plaques on his arm clinically improved dramatically (Fig. 1B); however, relapsed lesions newly developed as multiple nodules on the chest wall after 6 months. The patient refused further treatment because of his poor general condition. A signed consent form for publishing all photographic materials was obtained from the patient.

NK/T-cell lymphoma (NKTCL) is the most common subtype of peripheral T-cell lymphoma in Asia (22.4%)[1]. This geographic variation is associated with the high prevalence of EBV infection in Asians[1,2]. Nasal-type NKTCL has poor prognosis with aggressive clinical course; thus, early dissemination, early diagnosis, and proper management are needed[1]. However, cutaneous findings greatly vary and remain uncertain, and ENTCL does not show typical histopathological findings in the early stage[3]. Therefore, ENTCL diagnosis is difficult because it mimics the characteristics of benign inflammatory disorders such as cellulitis[4] and pyoderma gangrenosum[5]. In our case, B symptoms (fever [>38°C] and weight loss [≥10% of the total body weight in 6 months]) were noted with cervical lymphadenopathy, leading to more appropriate evaluation and treatment for better clinical outcomes.

In conclusion, to our knowledge, this is the first case of ENTCL mimicking an infectious granuloma in the literature. Thus, when patients present with abnormal systemic symptoms and signs with atypical cutaneous features, clinicians should consider lymphoma and perform proper skin biopsies and further immunohistochemical staining.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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