



SKIN MANIFESTATIONS OF INTERNAL DISEASE

## ANGIOIMMUNOBLASTIC T-CELL LYMPHOMA MIMICKING ERYTHEMA MULTIFORME

*Natnicha Girdwichai<sup>(1)</sup>*

*Saraburi Hospital, Saraburi Hospital/dermatology Unit/department Of Medicine, Saraburi, Thailand<sup>(1)</sup>*

**Background:** Angioimmunoblastic T-cell lymphoma (AITL) is rare variant of peripheral T-cell lymphoma (PTCL) with poor prognosis. It accounts for 15-20% of PTCL, usually occurs in older adults. Common manifestations include lymphadenopathy, hepatosplenomegaly, constitutional symptoms, cutaneous lesion, and involvement of non- lymphoid organs. Due to lack of specific clinical manifestations, AITL poses a diagnostic challenge.

**Observations:** A 54-year-old woman with diagnosis of hypertension and acute myeloid leukemia (AML) which achieved remission after chemotherapy 3 years earlier. She presented with progressive rash for 1 week. Skin examination showed generalized typical and atypical target lesions on chest, abdomen, back, upper and lower extremities including hands and feet. No mucosal involvement was observed. Other physical examinations revealed fever with generalized lymphadenopathy. Investigations revealed anemia with thrombocytopenia. Antinuclear antibodies and PCR for herpes simplex virus were negative. Computed tomography demonstrated hepatosplenomegaly and diffuse lymphadenopathy. Erythema multiforme was initially diagnosed. However, generalized lymphadenopathy is unusual in EM. So skin and lymph node biopsy were performed. Skin biopsy showed dense dermal infiltrate of lymphocytes, atypical lymphocytes, and few plasma cells. Immunostaining of infiltrating cells demonstrated CD3+, PD-1+, CXCL13+, and few CD20+. CD21 Follicular dendritic cells (FDCs) were negative. Lymph node biopsy showed interfollicular expansion due to polymorphous lymphoid proliferation and hypervascularity with arborization. Immunohistochemical staining demonstrated CD3+, CD5+ over CD20+, PD- 1+, and CXCL13+. CD23 FDCs were positive in germinal centers. Few Epstein-Barr virus-encoded RNA (EBER+) were detected. Bone marrow biopsy was normal. She was diagnosed with AITL and treated with chemotherapy consisting of cyclophosphamide, doxorubicin, vincristine, and prednisolone (CHOP). Unfortunately, disease progressed. She passed away a few months later.

**Key message:** Target lesions could be cutaneous manifestation of AITL. Dermatologists should consider AITL in patient with generalized target lesions, lymphadenopathy and fever. Immunohistochemistry and TCR gene rearrangement are helpful for diagnosis.

