

## Case 1

A 61-year-old Thai male from Nakornsri thammarat

### Present history:

The patient was presented with ill-defined erythematous, edematous, indurated plaque size 5 c.m. in diameter at left trunk for 1 month. The lesion had increased in sized and extended to left chest wall with secondary ulceration.

### Past history:

Hypertension, Ischemic heart disease

### Family history:

No familial history of similar skin lesion

### Physical examination:

Vital signs: Normal

HEENT: Not pale, No jaundice

Heart&Lung: WNL

Lymphnode: Not palpable

Skin : Ill-defined erythematous, edematous, indurated plaque with ulceration at left trunk extended to left chest wall. (Fig.1.1)

### Lab investigation:

- CBC : Hb 14.2 g/dl ,Hct 40%,WBC 6,400 /mm<sup>3</sup>, PMN 64%, Lymphocyte 25%,monocyte 9%, eosinophil 2%, Platelet 208,000

### Others

- CT scan : Normal findings
- Bone marrow aspiration/biopsy : no malignant



Fig.1.1

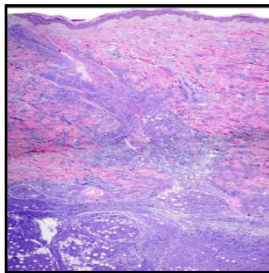


Fig 1.2 H&E

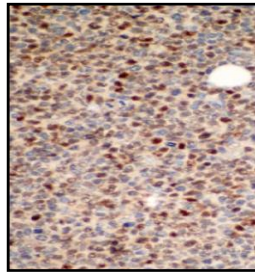


Fig 1.3 MYC

**Histopathology:** (s07-3193)( Fig 1.2 H&E - Fig 1.3 MYC)

Presence of diffuse infiltrations of atypical lymphoid cells entirely dermis and subcutaneous tissue in starry sky pattern. Numerous mitosis and apoptotic body imparted by scattered macrophages phagocytosis of cell debris are noted.

Immunohistochemistry: CD3(-), CD10(+), CD20(+), CD79A(+), KI 67 (+ IN 70 % of tumor nuclei), MYC(+), TDT(-), CYCLIN D1 (-)

**Diagnosis:** Primary cutaneous Burkitt's lymphoma

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**Treatment:** Chemotherapy (CHOP+Bleomycin)

**Discussion:**

Primary cutaneous lymphomas are relatively uncommon. They must be distinguished from secondary skin manifestations of primary nodal lymphomas. Primary cutaneous lymphomas are divided into B-cell- and T-cell cutaneous lymphoma and commonly have good prognosis. Among them, 65% are T-cell lymphomas, 25% B-cell lymphomas and about 10% are rare variants or nonclassifiable lymphomas.

Burkitt's lymphoma, a high-grade B-cell neoplasm having 3 major forms, the endemic (African), sporadic and immunodeficiency associated form is characterized by small non-cleaved cells that are uniform in appearance and produce a diffuse pattern of tissue involvement. Under the microscope, Burkitt's lymphoma is characterized by the presence of a "starry sky" appearance (also observed in other highly proliferative lymphomas), imparted by scattered macrophages with phagocytes cell debris. The African form most often involves the maxilla or mandible. In contrast, the sporadic form usually involves abdominal organs, with the most common involvement of the distal ileum, cecum, or mesentery. The Epstein-Barr virus (EBV) has been implicated strongly in the African form, while the relationship is less clear in the sporadic form. EBV is associated with about 20% of sporadic cases. Most Burkitt's lymphomas carry a translocation of the *c-myc* oncogene from chromosome 8. Burkitt lymphoma is a very fast growing tumor. Systemic chemotherapy is the



treatment of choice for this aggressive disease in all its stages. The overall survival rate of Burkitt lymphoma depends upon the stage of the disease at initial diagnosis. Patients with localized disease respond well to chemotherapy and have an excellent survival rate. Patients with disseminated disease respond less well to chemotherapy and have a less favorable survival rate.

Secondary skin involvement of Burkitt's lymphoma are not common and usually poorly documented in the literature. More over, primary cutaneous burkitt's lymphoma have never been documented in literature. This is the first case of primary cutaneous burkitt's lymphoma.

Although Burkitt's lymphoma is very aggressive, it response well to short-term, high-dose chemotherapy. Early detection and treatment are valuable. This case provided the existence of primary cutaneous burkitt's lymphoma

## References:

1. Lorenzo Cerroni and Helmut Kerl . B-cell lymphoma of the skin In : Jean Bologna, Joseph Jorizzo, Ronald Rapini. *Dermatology*. Elsevier,2003:1907-1919
2. Diebold J, Jaffe E.S. Burkitt's lymphoma In: Elaine S. ,Nancy. L, Harald S. World Health Organization Classification of tumor: Pathology & Genetics of tumor of Haematopoietic and lymphoid tissue. IARC Press, 2001: 181-184
3. Slater D.N. The new World Health Organization-European Organization for research and Treatment of Cancer classification for cutaneous lymphomas: a practical of marriage of two giants, review article. *British journal of dermatology*,2003;153:874-880
4. The American Society of Hematology. WHO-EORTC classification of cutaneous lymphomas. *Blood* 2005;105:3769-3785
5. Rebecca F.,Ellen D.,William R.,et al . Adult B cell lymphomas with Burkitt-like morphology .*Am j Surg Pathol*2005;29;1653-1659

