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DIAGNOSTIC DILEMMA: NON-HODGKIN LYMPHOMA SIMULATING CUTANEOUS T-CELL LYMPHOMA

Dermatology

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ABSTRACT

Systemic Non-Hodgkin Lymphomas (NHL) can present with cutaneous manifestations that are often overlooked, despite their significant prognostic implications. Early recognition of these signs is crucial for timely diagnosis and management. We report the case of a 64-year-old female who presented with multiple reddish raised lesions over the scalp, trunk, and limbs. Peripheral smear examination revealed atypical lymphoid cells. Skin and lymph node biopsies with immunohistochemistry confirmed a diagnosis of CD30-positive high-grade T-cell NHL. The patient was treated successfully with the ECHOP regimen.

KEYWORDS

Non-Hodgkin Lymphoma; Cutaneous T-cell Lymphoma; Cutaneous Manifestations; ECHOP Regimen

INTRODUCTION

Non-Hodgkin lymphomas (NHL) constitute a heterogeneous group of lymphoproliferative disorders with varied clinical presentations, biological behaviors, and prognoses. Approximately 50% of patients with NHL develop cutaneous manifestations during the course of the disease, which can sometimes lead to diagnostic confusion and delayed treatment. [1,2]

Case Presentation

A 64-year-old female presented with multiple reddish raised lesions over the scalp, trunk, and limbs for five years. The lesions initially appeared on the upper limbs and progressively involved the trunk, lower limbs, scalp, and forehead, accompanied by pruritus. She also reported intermittent fever for one year and significant weight loss over six months.

She had previously received treatment from various hospitals for a provisional diagnosis of chronic plaque psoriasis, with no clinical improvement. On examination, she had hepatosplenomegaly, bilateral cervical, and right inguinal lymphadenopathy. Cutaneous examination revealed multiple well-defined erythematous to hyperpigmented papules and infiltrated plaques over the scalp, forehead, retro-auricular area, neck, axillae, abdomen, groin, and thighs.

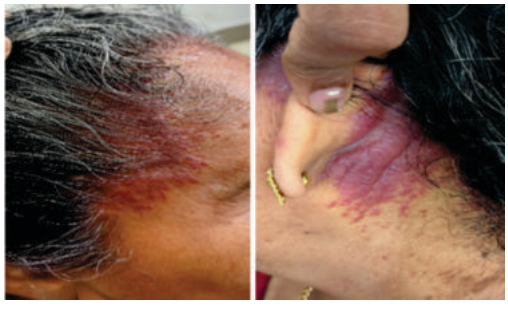

Fig 1.1 and 1.2: Multiple, well-defined erythematous plaques over the forehead and retro-auricular region

Routine blood investigations showed leukocytosis with lymphocytosis (lymphocytes: 49%). Peripheral smear revealed atypical lymphoid cells (76%). Initial skin biopsy suggested spongiotic dermatitis. Due to generalized lymphadenopathy and hepatosplenomegaly, an advanced cutaneous lymphoma was suspected.

Ultrasonography-guided FNAC of the left cervical lymph node showed reactive changes; however, excisional biopsy of the left supraclavicular lymph node with immunohistochemistry demonstrated CD30-positive high-grade T-cell NHL. A repeat skin biopsy also revealed tumor cells positive for CD30, CD3, and CD38, confirming the diagnosis. The patient was started on the ECHOP regimen (Cyclophosphamide, Doxorubicin, Vincristine, Etoposide Phosphate, and Prednisolone).

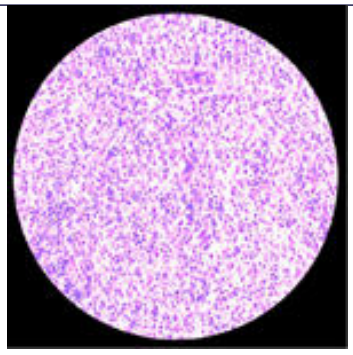

Figure 2: HPE showing large cell with vesicular nucleus with prominent nuclei and moderate amount of eosinophilic cytoplasm

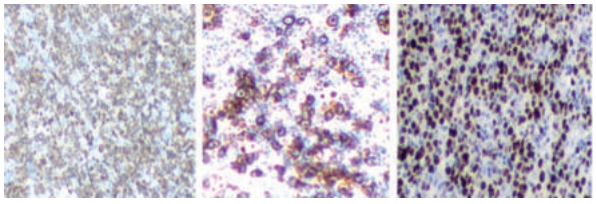

Figure 3: Immunohistochemistry
3.1: CD3
3.2: CD30
3.3: Ki67

DISCUSSION

Cutaneous manifestations of NHL are categorized as specific or non-specific. Specific lesions, characterized by infiltration of neoplastic lymphoid cells into the skin, occur in about 13–20% of systemic NHL cases [3]. These lesions may result from lymphatic spread, hematogenous dissemination, or direct extension from underlying lymph nodes [4]. Clinically, they present as polymorphic red papules, nodules, or plaques, often with ulceration or erythroderma, and typically indicate aggressive disease behavior and poorer prognosis [2,5].

Non-specific lesions, more common than specific ones, do not contain malignant cells but reflect underlying immune dysregulation [6]. These include infectious manifestations such as viral (molluscum contagiosum, herpes simplex, herpes zoster), fungal (tinea, intertrigo), or pyogenic infections [3]. Non-infectious cutaneous signs include pruritus, eczema, erythroderma, urticarial vasculitis, acquired ichthyosis, prurigo nodularis, Sweet's syndrome, pyoderma gangrenosum, and various paraneoplastic dermatoses.

B-cell lymphomas more frequently present with solitary asymptomatic nodules, whereas T-cell lymphomas, as in this case, typically present with multiple pruritic papules or nodules that may ulcerate superficially. These cutaneous lesions can precede,

accompany, or follow the systemic diagnosis.

CONCLUSIONS

Cutaneous manifestations that mimic common dermatoses can precede, coexist with, or follow the diagnosis of systemic lymphomas and may indicate advanced disease with a poorer prognosis.

Clinicians should maintain a high index of suspicion and perform timely skin biopsies with immunohistochemistry in suspected cases to ensure early diagnosis, appropriate staging, and optimal management.

REFERENCES:

1. Tan SH, Sim CS, Ong BH. Cutaneous lymphomas other than mycosis fungoides in Singapore: a clinicopathological analysis using recent classification systems. Br J Dermatol. 2003;149:544–553.
2. Mandal S, Varma K, Jain S. Cutaneous manifestations in non-Hodgkin's lymphoma. Acta Cytol. 2007;51:853–859.
3. Kumar SS, Kuruvilla M, Pai GS, et al. Cutaneous manifestations of non-Hodgkin's lymphoma. Indian J Dermatol Venereol Leprol. 2003;69:12–15.
4. Pipkin CA, Lio PA. Cutaneous manifestations of internal malignancies: an overview. Dermatol Clin. 2008;26:1–15.
5. McCann SA. Cutaneous manifestations of systemic disease: leukemia/lymphoma, systemic malignancy, hypothyroidism, diabetes mellitus, and neurofibromatosis. Dermatol Nurs. 2006;18:476–478.
6. Jaffe ES, Harris NL, Stein H, et al. Classification of lymphoid neoplasms: the microscope as a tool for disease discovery. Blood. 2008;112:4384–4399.