

Case Report

A Case Report of Cutaneous T-Cell Lymphoma – A Swift Strike

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ABSTRACT

The diagnosis of cutaneous T-cell lymphoma (CTCL) often poses a significant clinical challenge due to the marked variability and overlap of its clinicopathological features with a spectrum of benign dermatological conditions. Consequently, patients frequently experience symptoms mimicking common entities such as eczema, chronic spongiotic dermatitis, parapsoriasis and psoriasis for a considerable duration, often years, before a definitive diagnosis of CTCL is established. This diagnostic delay can lead to the disease progressing unnoticed until more advanced stages, potentially impacting treatment outcomes and causing frustration for clinicians. The mean time from the initial onset of symptoms to a confirmed diagnosis typically spans 3 to 4 years, but in some instances, it can extend to decades. This case report details the presentation of a 70-year-old male who exhibited a relatively rapid progression to Sézary syndrome (SS), the leukemic variant of CTCL. His initial symptoms of generalised pruritus and evolving scaly lesions rapidly progressed to involve the majority of his body surface area, accompanied by systemic features including significant weight loss and lymphadenopathy. Investigations revealed a high peripheral blood leukocyte count with circulating Sézary cells, and skin biopsy findings consistent with CTCL. Immunohistochemistry showed a characteristic T-helper cell phenotype (CD3+, CD4+ and CD7-). Bone marrow involvement confirmed the diagnosis of SS. This case underscores the importance of considering CTCL in the differential diagnosis of persistent and treatment-refractory generalised dermatoses, even when the initial presentation might seem benign, particularly when systemic symptoms and lymphadenopathy are present. The swift progression observed in this case highlights the aggressive potential of certain CTCL variants and the need for timely and comprehensive diagnostic evaluation to facilitate prompt management.

Keywords: Cutaneous T-cell lymphoma, Mycosis fungoides, Sézary syndrome, Skin of colour

INTRODUCTION

Cutaneous T-cell lymphomas (CTCL), most commonly Mycosis fungoides (MF) and its aggressive leukemic variant, Sézary syndrome (SS), pose diagnostic challenges due to their mimicry of benign skin conditions such as eczema and psoriasis. This often leads to delayed diagnosis and presentation at advanced stages. The average time from symptom onset to diagnosis is typically 3–4 years, but can be much longer. SS is characterised by leukaemia, erythroderma and lymphadenopathy, with diagnostic criteria including a Sézary cell count $>1000/\mu\text{L}$, CD4:CD8 ratio >10 and loss of T-cell antigens.^[1] CTCL is rare, accounting for 5.4% of cutaneous lymphomas, predominantly affecting older men.^[2] While MF and SS share similarities, SS is distinguished by the presence of neoplastic cells in the blood and a Th2 cytokine profile.^[3] This case highlights the rapid progression of CTCL and its overlapping features with benign dermatoses that can cause diagnostic delays.

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Figure 1: Clinical presentation of our patient. (a) Multiple, thick, hyperkeratotic plaques exhibiting hyperpigmentation and erythema on the forehead. (b) Erythematous scaly plaques observed within the bilateral groin folds. (c and d) Scaly plaques with crust formation evident on the face and neck. (e) Poikiloderma with associated scaling over the trunk. (f) Multiple erythematous scaly papules and plaques distributed across the abdomen and the groin folds. (g) Multiple hyperpigmented scaly plaques over hands and palms.

CASE REPORT

A 70-year-old male farmer presented with a 3-month history of worsening generalised pruritus and numerous itchy, dark and scaly lesions across his body. One week prior, he had a fever. His history included plant exposure, 8 kg weight loss in the past year and decreased appetite. He denied joint pain, chills or photosensitivity. He had prior treatment for chronic dermatitis with Apremilast and ayurvedic medications.

Physical examination revealed enlarged, non-tender lymph nodes and extensive hyperpigmented to erythematous scaly plaques covering over 90% of his body, including the face and palms. Yellowish scales were on the scalp. Nails and mucous membranes were unaffected [Figure 1].

Investigations showed a markedly elevated leukocyte count (64200 cells/ μ L). Peripheral blood smear showed 62% blast cells with a high nuclear-to-cytoplasmic ratio. Liver and renal function were normal, but serum alpha-fetoprotein was elevated at 147 IU/L. Potassium hydroxide mount (KOH) examination was negative. The abdominal ultrasound was unremarkable. Chest, abdomen and pelvis computed tomography revealed splenomegaly, bilateral axillary lymphadenopathy and small lung nodules. Viral screening was negative.

Skin biopsy showed hyperkeratosis, parakeratosis, epidermal atrophy, Pautrier microabscesses and dermal atypical lymphoid infiltrates, suggestive of MFs [Figure 2].

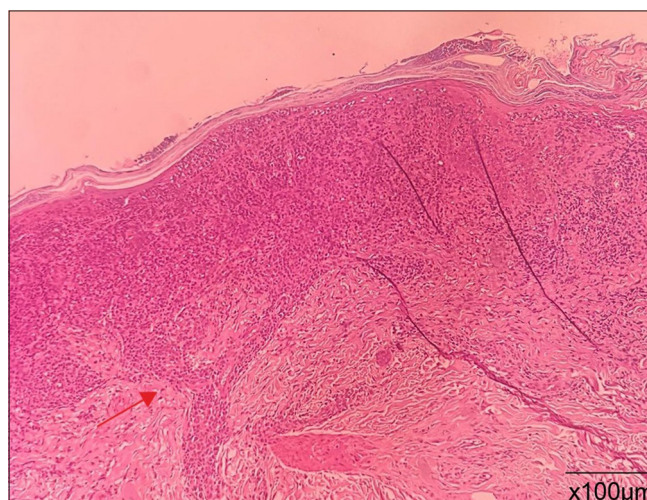


Figure 2: Haematoxylin and Eosin-stained slide, $\times 100$ view, showing hyperkeratosis, parakeratosis and atrophy of the epidermis and inflammatory infiltrate obscuring the upper dermis. The red arrow denotes epidermotropism.

Immunohistochemistry (IHC) showed CD3 positivity and CD7 and CD4 negativity [Figure 3].

Bone marrow aspiration and biopsy showed lymphoma cell infiltration. Flow cytometry revealed blast cells positive for CyCD3, CD4 and CD5, with moderate CD45, and negative for CD8 and CD26. Based on circulating blasts (Sézary cells) and T helper immunophenotype, SS was diagnosed. The patient was started on a CEOP regimen.

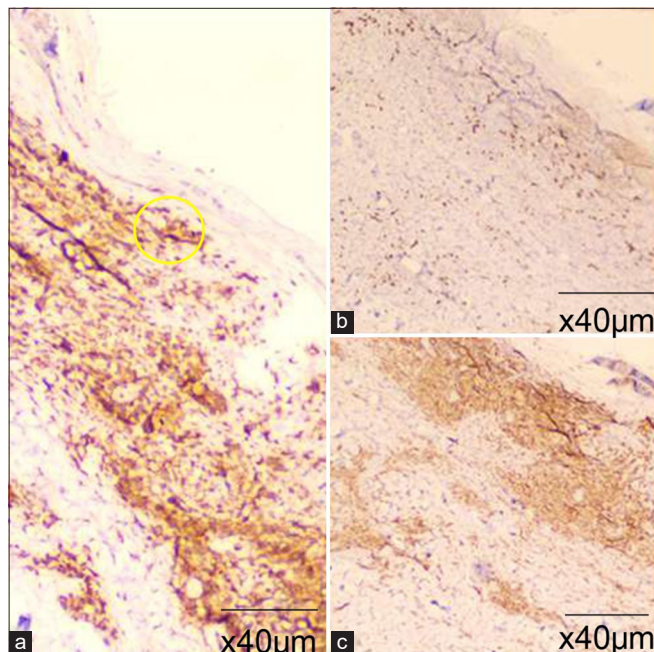


Figure 3: (a) IHC slide shows CD 3 positive lesional cells (yellow circle). (b and c) IHC slides show negativity for CD7 and CD4. 40x. IHC: Immunohistochemistry.

DISCUSSION

MFs, the most common CTCL, have an unpredictable course.^[4] Some MF patients have atypical Sézary cells in the blood. SS, a leukemic CTCL with pruritus, erythroderma and lymphadenopathy, has a poor prognosis with a median survival of 2–3 years.^[5] SS can arise from MF and is part of the MF spectrum. It typically presents with nonspecific erythroderma and systemic symptoms.

The diagnostic triad is erythroderma, lymphadenopathy and circulating Sézary cells,^[5] which are phenotypically abnormal T cells with a CD4+CD26-immunophenotype^[2] and cerebriform nuclei. While some report Sézary-like cells in reactive blood, they are generally considered malignant in SS. In this case, characteristic Sézary cells were identified, and skin biopsy IHC showed CD3+, CD4+ and CD45+ atypical lymphocytes, negative for CD8 and CD26. Treatment includes topical therapies, biological response modifiers and chemotherapy (e.g., CEOP). Recognising the indolent nature of MF versus the aggressive SS with shorter survival is crucial. This case is notable for its rapid progression to the leukemic phase, highlighting the variability within CTCL. The elevated alpha-fetoprotein and lung nodules suggest advanced disease and a poorer prognosis.

CONCLUSION

This case highlights an unusually rapid progression to SS, emphasising the need for a high index of suspicion for CTCL in patients with persistent, treatment-refractory generalised rashes, especially when accompanied by systemic symptoms and lymphadenopathy. Prompt and thorough investigation, including peripheral blood analysis and skin biopsy with immunohistochemistry, is crucial for the timely diagnosis and management of this aggressive lymphoma variant.

Ethical approval: Institutional Review Board approval is not required.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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REFERENCES

- Whittaker S, Cerroni L, Willemze R, Siebert R. Sezary Syndrome. In: Swerdlow S, Campo E, Harris N, Jaffe E, Pileri S, Stein H, *et al.*, editors. WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues. 4th ed. Lyon: IARC; 2017. p. 390-1.
- Rodd AL, Verweris K, Karagiannis TC. Current and Emerging Therapeutics for Cutaneous T-Cell Lymphoma: Histone Deacetylase Inhibitors. *Lymphoma* 2012;2012:290685.
- Willemze R, Kerl H, Sterry W, Berti E, Cerroni L, Chimenti S, *et al.* EORTC Classification for Primary Cutaneous Lymphomas: A Proposal from the Cutaneous Lymphoma Study Group of the European Organization for Research and Treatment of Cancer. *Blood* 1997;90:354-71.
- Ng PP, Goh GL. Sezary Syndrome: A Case Report and a Review of the Molecular Pathomechanism and Management. *Ann Acad Med Singap* 1998;27:864-7.
- Kim YH, Hoppe RT. Mycosis Fungoides and the Sézary Syndrome. *Semin Oncol* 1999;26:276-89.

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