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An Unusual Presentation of Chronic Lymphocytic Leukaemia

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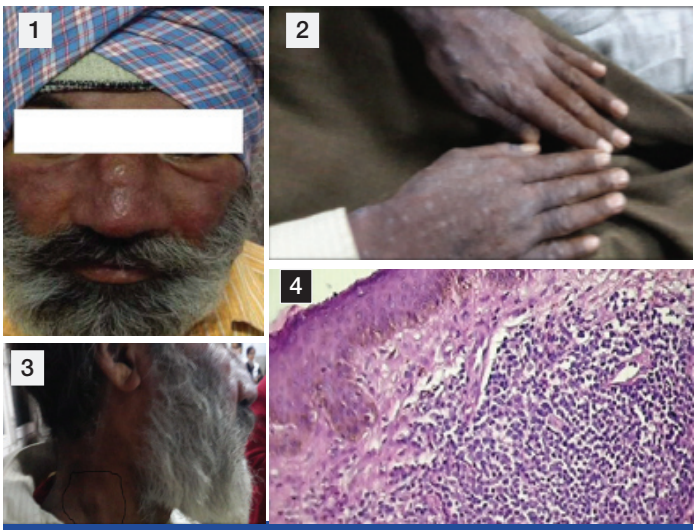
Skin infiltration in Chronic Lymphocytic Leukemia (CLL) is uncommon and can present in many different ways. Cutaneous CLL deposits develop most commonly on the face, but localized lesions can occur at other sites also and manifest as macules, papules, plaques, nodules, tumours, ulcers or blisters. Evident skin involvement is usually seen in Richter syndrome or T-cell CLL and it generally indicates a poor prognosis [1,2].

We present a case of CLL infiltrating multiple body areas. A 45-year-old, male patient, presented with complaint of skin rash over face, neck and forearms since last 9 months [Table/Fig-1,2]. The rash was present only over the sun exposed parts of the body like face, neck, forearm and hands and was associated with redness and itching. History of decreased appetite and weight loss was present since 4 months. Examination revealed generalized lymphadenopathy [Table/Fig-3] and erythematous papules and plaques on face, neck and dorsum of hands with hepatosplenomegaly. Complete blood counts showed Hb levels of 9.6 g/dl, TLC of 1.6 lac/mm^3, DLC with 94% lymphocytes, 4% of promyelocytes, 1% of neutrophils and 1% basophils and platelets of 68000/mm^3 and peripheral blood film was suggestive of marked leucocytosis. Bone marrow examination confirmed the diagnosis of CLL. Skin biopsy from the face showed abnormal lymphocytes infiltrating the dermis and subcutaneous tissue, suggesting skin infiltration by CLL [Table/Fig-4]. Patient was referred to oncologist and started on Chemotherapy.



[Table/Fig-1]: Showing of nodular swelling on skin of face
[Table/Fig-2]: Showing erythematous papules and plaques on both hands
[Table/Fig-3]: Showing cervical lymphadenopathy
[Table/Fig-4]: Skin biopsy showing abnormal lymphocytes infiltrating dermis

Infiltrative CLL can involve the head and neck, but involvement of multiple body areas, particularly toes and fingers is rare. The mechanism of cutaneous infiltration of leukemic cells is not well understood. Generally accepted theory is that, there is migration of lymphocytes from the vasculature to the dermis in CLL that is mediated by interaction between intercellular adhesion molecule-1 (ICAM-1) and lymphocyte function associated antigen-1 (LFA-1) [3]. Our patient had cutaneous infiltration as a first presenting symptom and had cutaneous infiltration not only on face and neck, but also on fingers and toes, which is rarely seen.

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