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CHRONIC LYMPHOCYTIC LEUKAEMIA MANIFESTING AS EXFOLIATIVE DERMATITIS

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A 60-year-old patient reported with a history of redness and peeling of the skin, and sensations of chills and tightness of the skin of three months duration. Clinical examination revealed exfoliative dermatitis, generalised lymphadenopathy and hepatosplenomegely. A peripheral smear showed features of chronic lymphocytic leukaemia.

Key Words : Chronic lymphocytic leukaemia, Exfoliative dermatitis

Introduction

Chronic lymphocytic leukaemia (CLL) is a haematological neoplasm characterised by the proliferation and accumulation of relatively mature-appearing lymphocytes in the blood, bone marrow, lymph nodes, liver, spleen and rarely the skin. In most cases it is due to B-lymphocytes but a small proportion of cases involves the monoclonal T-cells (less than 5%).[1] Dermatological findings are generally seen in patients with T-cell lymphocytic leukaemias. We report a case of CLL manifesting as exfoliative dermatitis.

Case Report

A 60-year-old man, resident of Kerala, developed pruritic, oozing skin lesion of the hands and feet six months prior to presentation. For three months he had developed redness and peeling of the skin of the entire body, and sensations of chills and tightening of the skin. There was no history of application of a local irritant or allergen, or intolerance or reaction to any drug nor was there any history of preexisting dermatosis. There was no history of fever, weight loss, anorexia or weakness.

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Dermatological examination revealed lichenification, erythema and exfoliation of the skin of the entire body. These changes were more prominent on the trunk and the proximal parts of the limbs. There was oozing and crusting of both feet. The inguinal lymph nodes were enlarged (>2 cm), discrete, mobile, soft and non-tender. Both the axillary and the cervical lymph nodes were palpable (<2 cm) and were soft, discrete, mobile and nontender. The liver was enlarged. It was palpable 3 cm below the right subcostal margin and was soft and non-tender. The spleen was just palpable. The buccal mucosa, genitalia, hair and nails were normal. Systemic examination did not reveal any abnormality.

A number of investigation were undertaken. Hb 9.0 gm% and TLC 1,03,000/ cmm (P 10%, L 88%, E2%, M0%, B 0%). The peripheral smear revealed mature lymphocytes as the predominant cell in the WBC series. A few atypical lymphocytes and smudge cells were also seen. The RBC series showed predominantly a normocytic picture with mild hypochromia. The platelet picture was normal. A similar picture was also seen in the bone marrow examination. Skin biopsy revealed a nonspecific picture of chronic dermatitis. All other investigations including USG abdomen, X-ray chest, LFT, VDRL test, and HIV (ELISA) test were within normal limits.

The patient was initially treated

conservatively with bed rest, a course of erythromycin, haematinics and local application of emollients. In two weeks the patient's general condition improved, and the sensation of tightness and chills was reduced. There was marked improvement of the exfoliation of the skin. A repeat peripheral blood smear two weeks later showed a picture similar to the one taken at the time of presentation. The patient was then put on chlorambucil and prednisolone therapy by the oncologist.

Discussion

The dermatological manifestations of leukaemias or lymphomas may be specific or nonspecific. Specific skin manifestations show a well defined infiltrate of abnormal leukaemia or lymphoma cells on histopathological examination and are represented by nodules, papules or macules. Non-specific manifestations do not show such an infiltrate and are represented by ichthyosis, pruritus, exfoliative dermatitis, petichae or purpura.

It is believed that 2% of patients of CLL manifest with skin changes.[2] Patients with T-cell lymphocytic leukaemia are known to present with generalised erythroderma, splenomegaly and lymphadenopathy. It is believed that erythroderma is due to lymphokines released by malignant T-cells while passing through dermal blood vessels.

Dermatological manifestations in leukemias and lymphoma have been infrequently documented in the Indian literature. Tharakaram et al[3] reported specific dermatological changes in 4 cases of leukaemia, 5 cases of non-Hodgkin's lymphoma and 3 cases of Hodgkin's lymphoma. None of the 4 cases of leukaemia were of the CLL type.

In the present case, which presented with exfoliative dermatitis accompanied by a picture of lymphocytosis on peripheral smear, the following conditions were kept in mind:

(a) CLL,

(b) CLL with exfoliative dermatitis as a separate entity, and

(c) Sézary syndrome.

The possibility of Sézary syndrome was excluded by the clinical picture, absence of more then 10% abnormal lymphocytes and essentially a nonspecific picture on histopathological examination. The possibility of CLL and exfoliative dermatitis being separate entities is unlikely as no other cause could be found for the exfoliative dermatitis.

References

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