

SPECIFIC SKIN INVOLVEMENT IN LEUKAEMIAS AND LYMPHOMAS

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Four cases of leukaemia, 5 cases of non-Hodgkin's lymphoma and 3 cases of Hodgkin's lymphoma, developed maculo-papular rashes, papules, nodules, urticarial skin lesions and a plaque. Each of these on histopathology, showed a specific skin infiltrate corresponding to the malignancy.

Key words : Skin markers, Lymphoma, Leukaemia, Hodgkin's.

Skin manifestations in leukaemia and lymphoma may be specific or non-specific. Specific skin lesions, show a well-defined dermal infiltrate of the abnormal leukaemia or lymphoma cells in the skin lesions. The non-specific skin lesions do not have such an infiltrate. The non-specific skin signs are more common, are not characteristic of the disease and may manifest as ichthyosis, dermatomyositis, pruritis and herpes zoster.

We are reporting the specific skin involvement observed in 4 cases of leukaemia, 5 cases of non-Hodgkin's lymphoma, and 3 cases of Hodgkin's lymphoma.

Materials and Methods

Patients with leukaemias and lymphomas who had skin lesions were randomly selected from the haematology, cancer chemotherapy, medical and surgical departments of our hospital. Patients with skin lesions which showed a specific skin infiltrate on histopathology were included. Blood smear, bone marrow, and lymph node biopsy were done for all cases.

Results

The general signs/symptoms of leukaemias included fever, asthenia, anaemia, purpura or bleeding diathesis. Specific skin signs appeared

as maculo-papular lesions, papules or nodules which were histopathologically characteristic. Other skin lesions such as petechiae and purpura were often the result of thrombocytopenia and did not show the leukaemic infiltrates in the skin biopsy. The leukemic skin infiltrates were seen in acute lymphoblastic leukaemia (1 case), acute myelomonocytic leukaemia (2 cases) and chronic myeloid leukaemia (1 case).

All the 5 cases of non-Hodgkin's lymphoma had generalised lymphadenopathy and in 4 of these, the nodules were present at the onset. Nodal histopathology showed a lymphocytic lymphoma of the poorly differentiated variety, and the skin infiltrate comprised a monomorphous lymphoma picture in all the 5 cases. In 4 cases, the skin lesions remained nodular, while in the last case the skin lesion comprised a plaque of coalescent, fungating nodules. One case developed nodules in the scrotal skin resembling sebaceous cysts.

Specific skin infiltrates in Hodgkin's lymphoma occurred late in 2 of the 3 cases, while in the third case, skin involvement occurred early. In one case, the pruritic urticaria-like skin lesions showed a specific skin infiltrate. In another case the skin nodules showed a polymorphous lymphoma picture. Five months later, he developed clinical and mediastinal nodal enlargement with fever and loss of appetite. Histopathology of the nodes showed marked reticular cell hyperplasia, mirror image and Reed-Sternberg giant cells in profusion along

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with a few lymphocytes and eosinophils, the picture being compatible with the lymphocytic depletion type of Hodgkin's disease. The lesions disappeared with chemotherapy COPP regimen and radiotherapy 400 rads. The patient is maintaining the remission.

Comments

Osgood¹ classified skin lesions in leukaemia into specific and non-specific lesions. Of the 4 cases of leukaemic skin infiltrates, two were from acute myelomonocytic leukaemia and one each from chronic myeloid leukaemia, (reported incidence being 1%), and acute lymphoblastic leukaemia (reported incidence 3%).² The specific skin manifestations of leukaemia comprised maculo-papular rashes, papules and nodules. None of our cases were from chronic lymphatic leukaemia believed to be the commonest³ cause of specific skin involvement in leukaemia.

All our 5 cases of non-Hodgkin's lymphoma belonged to the poorly differentiated lymphocytic lymphoma. Four of the five cases presented along with extranodal disease. Marrow was involved in only 2 cases, while the blood smear was normal in all. Specific skin involvement in non-Hodgkin's lymphoma is reported to occur in 17% of cases and is the presenting sign in 5% of cases.⁴ The initial manifestation may be a single or multiple cutaneous nodules,⁵ as seen in our cases. Distinction from lymphoma-like conditions is made by the atypical, closely aggregated cells with marginal definition of cell groups and single row invasion.⁶

Specific skin involvement in Hodgkin's disease occurs in only 0.5% of cases.⁷ Skin involvement may occur by lymphatic spread, contiguity involvement or by blood spread.⁸ One of our cases with widespread urticaria-like specific skin lesions represents an example of blood spread.

Skin involvement in the preterminal phase may indicate stage-IV disease.⁷ Exceptions to this include cases where the skin is involved

from a subjacent node, or if the presentation is primarily cutaneous,⁹⁻¹² as in our case.

Specific skin lesions of Hodgkin's disease include papules, plaques, nodules, ulcers or pigmentary changes occurring alone or in combination.¹³ Pruritic specific skin lesions are uncommon and occurred in one of our cases; it is believed to imply a poor prognosis.¹⁴

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