

Non-Hodgkin's Lymphoma With Cutaneous Manifestation

Dr. G. P. Pokhrel,

MBBS D. Derm, Msc Derm (UK)

Dr. H. G. Shrestha, MD

Non Hodgkin's lymphoma is a rare malignancy of mostly the B Lymphocyte cell series which often have cutaneous lesions as their initial manifestation. Here is a report of one such case seen at the Teaching Hospital Dermatology department.

K. S. a 27 year old housewife presented on July 1987 with multiple large cutaneous nodules and tumors and increasing proptosis of her right eye. 3 months back she first noticed a large painless swelling below her right knee. Subsequently nodules and tumors started to develop over her limbs and face and since past 2 weeks proptosis of right eye. She was constitutionally asymptomatic, well nourished and comfortable. The tumors and plaques ranging from 10 cm × 7 cm to 2 cm × 1 cm. were distributed asymmetrically over both upper and lower limbs. They were firm, shiny, non tender, dusky red and freely mobile over underlying structures. There was marked proptosis of her right eye with chemosis but vision was intact. There was generalized lymphadenopathy. The nodes were discrete, firm, mobile non tender and almost to walnut size. The spleen and liver were also palpable. Full blood count was normal, Erythrocyte Sedimentation Rate (ESR) was raised. Skin and a lymph node biopsy was done which showed a large number of small round oval cells with hyperchromatic nuclei in the deep dermis and subcutaneous tissue. Some of the cells had elongated vesicular nucleus with prominent nuclei, mitotic figures were present. The tumor cells were in groups forming several follicular structures. The cells looked packed and scant intercellular space was seen. No Reed-Sternberg cell was seen. Similar types of cells were seen in the lymph node with destruction of the nodal architecture. A diagnosis of non-Hodgkins histolymphocytic lymphoma was made. She was on a cocktail of antimitotic drugs. She initially made very good recovery. She was subsequently referred for radiotherapy treatment.

Discussion

Lymphomas are a group of malignant neoplasia derived either from 'B' or 'T' lymphocytes or from histiocytes. The lymphomas are divided into (1) Hodgkins disease which is derived from histiocytes (2) non-hodgkin's lymphoma largely derived from 'B' lymphocytes and (3) mycosis fungoides derived from 'T' lymphocyte. Immunologic staining of biopsy specimens using monoclonal antibody is essential in confirming the true nature of cell involved.

Only 0.5% patients with Hodgkin's disease have specific skin lesions, by contrast the overall involvement in non Hodgkin's lymphomas is about 20%. Many of the histologic and clinical features of 'B' all and 'T' cell lymphoma overlap and are nonspecific. Moreover, pseudo lymphomas which are benign lesions, can mimic were both T and B cell lymphomas. It is important to distinguish between these types so as to institute correct therapy and make prognosis. In pseudolymphomas which consist of lesions either lymphomatoid papulosis and hyperplastic lymphoproliferative reaction to various trauma, clinically multiple plaques, tumors and nodules can be seen. Histologically the upper dermis is more involved and the configuration is either nodular, diffuse or follicular. There is no epidermotropism and the adnexa are spared. These lesions are mainly self limiting and require no treatment.

In cutaneous T cell lymphomas (Mycoses fungoides) clinically long duration (5-20 years) eczematoid, plaques and tumors of various sizes, often ulcerated, multiple and widespread, are seen. On histology, the upper and mid dermis is involved, there is epidermotropism forming Pautrier's abscess. The cells seen are atypical lymphoid. The course is unpredictable depending on the stage of disease. Patients can be treated with topical chemotherapy, PUVA, electron beam or system chemotherapy.

In cutaneous 'B' cell lymphoma, as in this case, multiple nodules, tumors without scale are seen. Histologically, mid and deep dermis is involved. The infiltrate is mainly nodular. There is no epidermotropism. The cells are monomorphous with clonal proliferation of lymphoplasmacytoid cells, lymphocytes with few macrophages or eosinophils. The infiltrate involves the adnexa.

As this case illustrates, the rapid onset of the lesion with large nodules and tumors with involvement of lymph nodes, diagnosis can be confusing. This case was initially misdiagnosed and treated as erythema nodosum leprosum. Biopsy of skin and lymph node solved the problem.

References

1. Burg G.; Kerl H. et al: *J Dermatol Surg Oncol*, 1984; 10: 256-62.
2. Burg G.; Kerl H: *J Dermatol Surg Oncol*, 1984; 10: 271-275.
3. Kerl H; Burg G: *J Dermatol Surg Oncol*, 1984; 10: 266-270.
4. Lever W.; Lever G.; *Histopathology of Skin 6th edition*, 1983, Philadelphia.
5. Wilkel C. S. Grand-Kels J. M: *Arch Dermatol*, 1987; 10: 1362-1367.