A 25-year-old man who had suffered from Hodgkin’s disease mixed cellularity type, stage III B, since eight years ago, was referred to our center for cutaneous eruptions evolving for one year. According to his oncologist, the chemotherapy with eight cycles of adriamycin (doxorubicin), bleomycin, vinblastine, and dacarbazine (ABVD), revealed an apparently good remission. On examination, he exhibited confluent erythematous papules and plaques with some areas of atrophy, scar, and pigmentation which involved symmetrically the lower limbs (Figures 1 and 2). Clinical examination also disclosed mildly enlarged laterocervical lymph nodes.

What is Your Diagnosis?

See the next pages for the diagnosis.

Azita Nikoo MD*, Kamran Balighi MD**

Author’s affiliation: *Department of Dermatopathology, **Department of Dermatology, Razi Hospital, Tehran, Iran.

*Corresponding author and reprints: Azita Nikoo MD, Department of Dermatopathology, Razi Hospital, Vahdat Esfami Sq., Tehran, Iran.
Tel: +98-215-515-9888, Fax: +98-214-444-0471
E-mail: anikoo@tums.ac.ir
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Patients with Hodgkin's and non-Hodgkin's lymphomas may develop noninfectious granulomas in the skin. Cutaneous noninfectious granulomas associated with malignant lymphomas may be granulomatous infiltrates admixed with neoplastic cells within specific skin lesions of malignant lymphoma, or granulomas (sarcoid-like granulomas, necrobiotic granulomas, and granuloma annulare) at sites free from any histologic evidence of malignancy; so, granulomatous skin lesions may be nonspecific manifestations of the underlying lymphoma. They may either antedate the underlying lymphoproliferative disease or may follow its course, sometimes occurring during chemotherapy and radiotherapy. As mentioned before, these granulomas are seen at sites free from any histologic evidence of malignancy such as some particular lymph nodes, liver, and spleen. Skin is involved more rarely.1–3

The pathogenic mechanism of skin granulomas in Hodgkin's disease and other lymphomas is not clear. These granulomas may arise as a local-tissue response to cytokines produced by neoplastic cells or sarcoid-like reactions to foreign bodies or against disintegration products from the tumor or against micro-organisms such as fungi or mycobacteria. Another mechanism may be opportunistic infections or reactions to chemotherapy.2,4 Generalized granuloma annulare was also reported in a Hodgkin's disease patient following autologous peripheral stem cell transplantation.5

There is no strong evidence for any relationship between granuloma formation and prognosis of the associated systemic lymphoma. While some authors suggested that granuloma is a host-protective response against lymphoma and a good prognostic indicator, others believe that granuloma is associated with poor prognosis.1,6–8

In the case reported here, the histopathology of a papule showed, under an acanthotic but uninvolved epidermis, a well-defined non-caseating, granuloma composed of epithelioid histiocytes and giant cells with some lymphocytes at the periphery. As mentioned before, these granulomas are seen at sites free from any histologic evidence of malignancy such as some particular lymph nodes, liver, and spleen. Skin is involved more rarely.1–3

The histologic features of an area of atrophy, scar, and pigmentation (necrobiotic, palisaded granuloma) (H&E, ×40). (Figure 3)

Histomorphologic features of an area of atrophy, scar, and pigmentation (necrobiotic, palisaded granuloma) (H&E, ×40). (Figure 3)

Histomorphologic features of confluent erythematous papules (noncaseating granuloma) (H&E, ×40). (Figure 4)
features were atypical with atrophic plaques and some areas of scar and pigmentation. Our patient was also a good example of the different expressions of granulomatous reactions in the skin noninvolved by an underlying systemic lymphoma as a nonspecific manifestation.

References


