Three Sequential Lymphomatous Tumors in a Patient

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Indian J Dermatol 2018:63(5):443-4

Sir,

Secondary lymphomas have been described in patients with cutaneous lymphomas.[1] We report a 69-year-old female with a series of lymphomas: Hodgkin’s lymphoma, mycosis fungoides (MF), and marginal zone B-cell lymphoma/chronic lymphomatous leukemia.

The patient presented with enlarging left axillary lymphadenopathy in 2006 and histology revealed CD30+ atypical Reed–Steinberg lymphoid cells. Staging scans were negative, and she was diagnosed as Stage IA Hodgkin’s lymphoma. She underwent four cycles of adriamycin, bleomycin, vinblastine, and dacarbazine and localized radiotherapy with subsequent remission.

She also had a 5-year history of itchy eczematous plaques, beginning in 2001, which were present over her trunk and limbs covering a body surface area of 10%–20%. This was treated as endogenous eczema with topical steroids. The lesions waxed and waned.

In 2012, 6 years after her diagnosis of Hodgkin’s lymphoma, she developed brown infiltrated papules and plaques over her right knee [Figure 1]. A skin biopsy showed a dense dermal infiltrate of CD4 positive and CD7 negative small to medium-sized atypical T lymphocytes [Figure 2].

Positron emission tomography revealed a fluorodeoxyglucose avid inguinal lymph node, which on histology showed changes of dermatopathic lymphadenopathy without atypical lymphoid involvement. A bone marrow examination was normal. This constituted Stage 1B (T2N0M0B0) cutaneous T-cell lymphoma – plaque stage MF. She was treated with combination ultraviolet A1 and narrowband ultraviolet B phototherpay and topical steroids, with resultant thinning of the lesions.

In 2015, she developed skin thickening of the right side of the neck, left cheek, and right knee plaque. A biopsy was again consistent with MF.

In 2016, 10 years after the initial diagnosis of Hodgkin’s lymphoma, routine blood count showed elevated peripheral lymphocyte counts – an absolute lymphocyte count of 7.43 × 10⁹ (usual range 0.94–3.08 × 10⁹). A bone marrow examination was nondiagnostic, but flow cytometry demonstrated an abnormal population of postgerminial center memory B cells, with features consistent with a non-aggressive, small B cell lymphoma/leukemic (chronic lymphocytic leukemic vs marginal zone lymphoma). She was conservatively managed as there was no myelosuppression and the whole body computed tomography did not reveal any lymphadenopathy or organomegaly.

In 2017, she developed worsening of truncal rashes with a repeat biopsy consistent with plaque stage MF. A timeline is shown in Figure 3.

Patients with cutaneous T-cell lymphomas are at higher risk of developing secondary cancers. A study of patients with MF or Sezary syndrome found a significantly increased standardized incidence ratio (SIR) of Hodgkin’s lymphoma (SIR 17.1) and non-Hodgkin’s lymphoma (SIR 5.08).[1] Mechanisms postulated included immunosuppression from mutagenic
effects of cytostatic drugs,[1] impaired T-cell immunity,[2] and underlying viral infection, e. g., human T-cell lymphotrophic virus type 1,[3] and Epstein–Barr virus, assumed to be involved with the pathogenesis of B and T cell lymphomas.[4]

This case is important as it highlights a series of three lymphomatous malignancies developing in a single patient. The development of three lymphomatous malignancies has been rarely reported in the literature.[5] Although it is uncommon for the coexistence of multiple lymphomas, physicians should remain vigilant for the development of these in a patient over the course of time.

Declaration of patient consent
The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

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