Sir,

T-cell lymphoma in the eyelid following intestinal B-cell lymphoma

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Extranodal lymphoid tumors can arise in the eyelid, the orbit, the lacrimal gland or the conjunctiva, either as isolated lesions or as part of a systemic lymphoma. Generally, malignant lymphoproliferative disorders are of monoclonal origin. There are, however, rare but well documented cases of biclonal lymphoproliferative diseases in which two clones of neoplastic cells proliferate concurrently or sequentially.[1] The phenomenon of two different histologic types of lymphomas in different anatomical locations is termed discordant lymphoma. We present a case of eyelid T-cell lymphoma following chemotherapy and partial remission of low grade B-cell lymphoma of the intestine. To our knowledge, this is the first case report in the English literature describing a discordant lymphoma in the eyelid. The pathogenesis of discordant lymphoma is also discussed.

Case report

A 78-year-old man presented with vomiting of coffee ground-like material in May 1998. He was admitted for evaluation and then underwent surgery, supposedly for an intestinal tumor. The specimen resected from the ileum revealed B-cell follicular type non-Hodgkin's lymphoma (NHL), with mixed small and large cells (Revised European American Lymphoma (REAL) classification).

Immunohistochemical stains were positive for CD20/L26 in the the lymphoid cells and trace for CD3 (Figure 1). The patient received chemotherapy of six courses of the CHOP regimen (cyclophosphamide, doxorubicin hydrochloride, vincristine sulfate (Oncovin) and prednisolone). The chemotherapy achieved partial remission, with several visible lymph nodes in the mesentery region on the abdominal computed tomographic (CT) scan.

In June 1999, the patient was referred to the department of ophthalmology for a rapidly enlarging eyelid mass, which failed treatment of excision and curettage in a local eye clinic. The patient presented with a firm, nontender, 3 × 3-cm nodular mass with central hemorrhage and ulceration on the medial aspect of the right upper eyelid (Figure 2). The eyeball was normal, except that the ptotic eyelid obscured it. The orbital CT scan showed a mass in the upper eyelid without orbital involvement. The histopathological examination of the excisional biopsy showed a peripheral T-cell lymphoma (REAL classification) with monotonous medium to large-sized lymphoid cells with irregular nuclear contours, abundant clear cytoplasm and low mitotic index (Figure 1). The immunohistochemical study showed expression of surface antigens CD3 and CD43, but not CD20/L26 (Figure 1), and there was no atypical large B cell. Considering the old age of the patient, treatment consisted of local radiation therapy and interferon alpha maintenance therapy. The eyelid tumor regressed soon after treatment. The patient currently receives maintenance interferon alpha therapy at the eye clinic. Two years after the initial treatment, there was no recurrence of peripheral T-cell lymphoma of the eyelid.

Comment

In most cases, the two components of discordant lymphomas are non-Hodgkin's lymphomas of the B-cell immunophenotype.[1,2] Discordant lymphomas with B-cell and T-cell components are rare in the medical literature.[1,3–8] Most discordant B-cell and T-cell lymphomas arise from the lymph nodes, bone marrow or spleen. There is only one report of a patient who had an initial B-cell lymphoma at the base of his tongue, and then developed a T-cell lymphoma 4 years later, as proven by an inguinal lymph node biopsy.[4] Another patient had a B-cell lymphoma in the eyebrow and generalized lymphadenopathy of T-cell lymphoma simultaneously.[1] To the best of our knowledge, there is no reported case of a discordant T-cell lymphoma in the eyelid.

The relationship between the two lymphomas was uncertain. Possibly, the two components were unrelated and coincidental. In most cases, an indolent, low-grade B-cell lymphoma occurs first, so that the patient may survive long enough for a second, unrelated lymphoid malignancy to develop.[1,3,7] The other possibility is that the two components were related. Medeiros and Stetler-Stevenson[9] proposed four mechanisms for discordant lymphomas of B-cell and T-cell immunophenotypes. First, they may result from the malignant transformation of an immature, stem cell. Second, the lymphomas may result from shared oncogene activation or tumor suppressor gene inactivation. Third, exposure to a common carcinogen could independently transform B-cell and T-cell progenitors. Fourth, cytokines secreted by the initial neoplastic cell population could have a role in the development of a second neoplasm. Moreover, patients with immune deficiencies such as post-renal transplantation are at increased risk for the

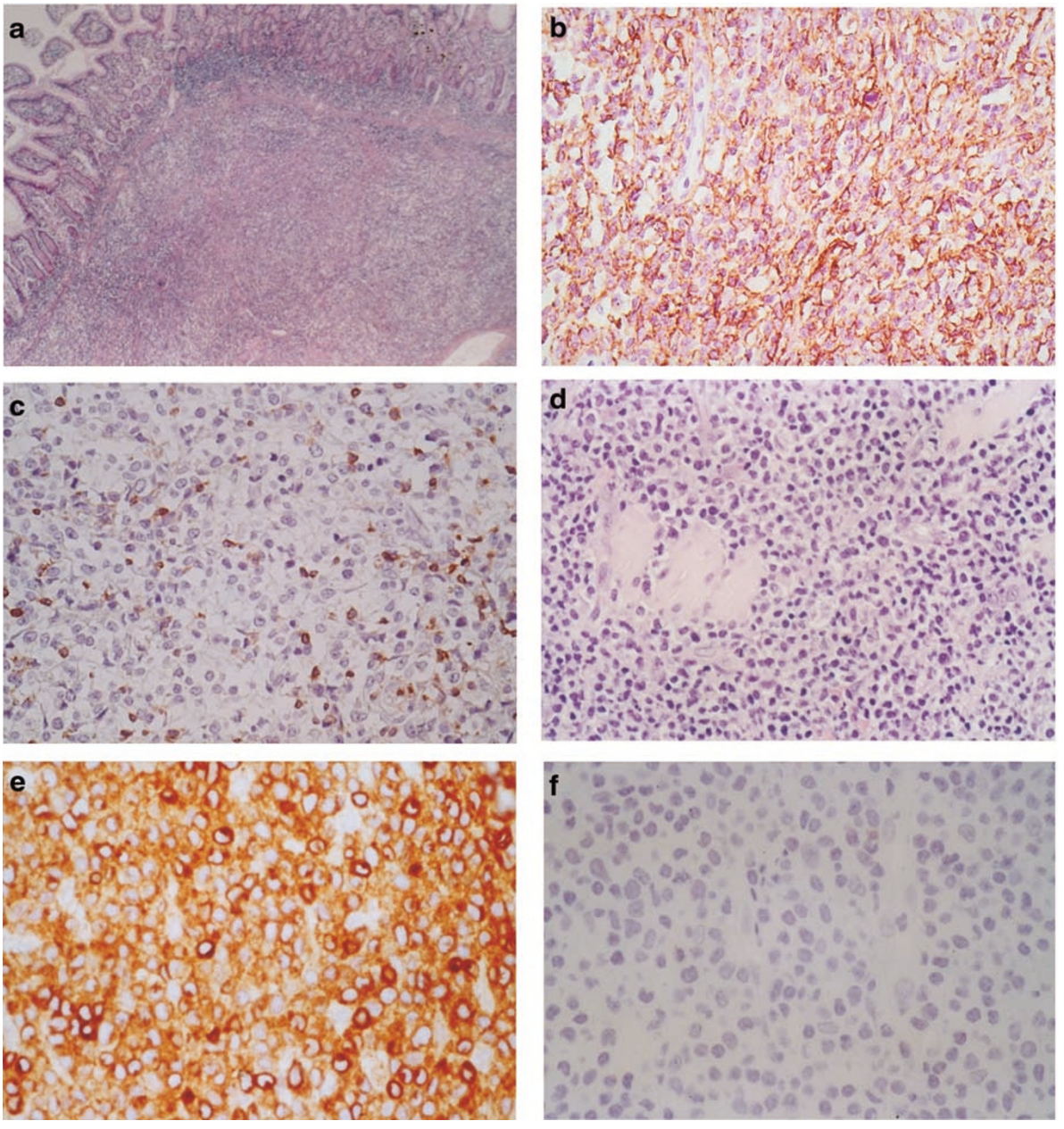

Figure 1 (a) B-cell lymphoma in small intestine stained with H & E (× 40). (b) The results of immunohistochemical testing of small intestine disclosed diffuse immunopositivity for B cells (L26); and (c) trace immunostaining for T cells (CD3) (immunoperoxidase stain, ×400). (d) Histologic specimen from right upper eyelid showed diffuse, heterogeneous, lymphoid proliferation with arborizing epithelioid venules characteristic of peripheral T-cell lymphoma (H & E, × 200). The immunohistochemical stains were of T-cell lineage: (e) positive for CD3; and (f) negative for L26 (immunoperoxidase stain, ×400).

development of lymphoma, which is most often Epstein–Barr virus-associated.[5] In addition, malignancies may occur as a result of treatment.[7,8] Chemotherapy, especially alkylating agents, is known to increase the risk of secondary hematopoeitic neoplasms, most commonly acute non-lymphocytic leukemia, but also non-Hodgkin's lymphomas, usually after a latent period of 1–2 years.[10]

Most investigators reported worse response and survival rates for peripheral T-cell lymphomas than for comparably staged, aggressive, B-cell lymphomas.[11] A review of the reported cases of T-cell lymphoma following B-cell lymphoma showed that all the patients died within 1 year after the second lymphoma developed.[1,4,6,7] While the incidence of discordant lymphomas is rare, clinicians should closely monitor

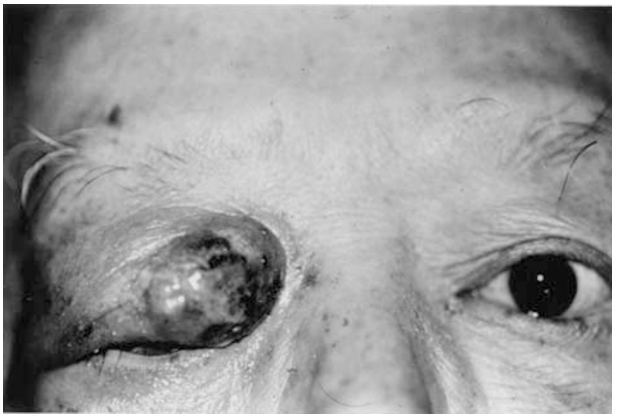

Figure 2 A 3 × 3-cm nodular mass with central hemorrhage and ulceration on the medial aspect of the right upper eyelid. The inflammatory tumor initially mimicked an hordeolum.

patients with documented malignant hematologic disorders for a second malignancy.

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Sir,

Squamous cell carcinoma of the eyelid in a renal transplant patient

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Immunosuppressive therapy following organ transplant surgery is known to significantly increase the incidence of cutaneous squamous cell carcinoma (SCC).[1–5] One Dutch study[6] found the incidence of SCC to be 250 times greater than that of the general population and that the risk increased with the duration of immunosuppression. In their study approximately 7% of transplant patients had developed a SCC after 10 years of treatment, this figure increased to 35% after 20 years.[6] SCC in immunosuppressed patients most commonly affects the sun-exposed areas of the body and tends to be more aggressive that those lesions in immunocompetent individuals.[2–5] We report the case of a renal transplant patient who developed an aggressive SCC on the right upper eyelid.

Case report

A 35-year-old renal transplant patient was referred to our eye department with a large lesion affecting the right upper eyelid (Figure 1). The lesion had developed rapidly over the previous 8 weeks, reaching approximately 25 mm in size. An incisional biopsy prior to referral, reported the lesion to be a squamous