

Primary skin manifestation of plasmoblastic lymphoma in an AIDS patient with long-term survival

Editor

A 66-year-old male patient was known being HIV positive for more than 10 years at CDC stage C3. At regularly presentation, a transient viraemia with HIV PCR of 322 cps/mL and CD4 = 120/μL was detected under therapy with tenofovir disoproxil fumarate, emtricitabine and norvir-boosted atazanavir. However, the general condition of the patient was stable for years. Additionally, he demonstrated a skin lesion on his left lower leg, which occurred few weeks prior to consultation without any further symptoms. Dermatological clinical examination showed a single 10 × 7 centimetres large erythematous-brownish infiltrated plaque on the left lower leg (Fig. 1). Under the clinical diagnosis of cutaneous lymphoma, a punch biopsy was taken from the affected area.

The histological examination revealed dense cell infiltrate (Fig. 2a) of immunoblast-like cells with pale basophil cytoplasm



Figure 1 Erythematous brownish indurated plaque on the left lower leg with nodular parts and relative distinct edges.

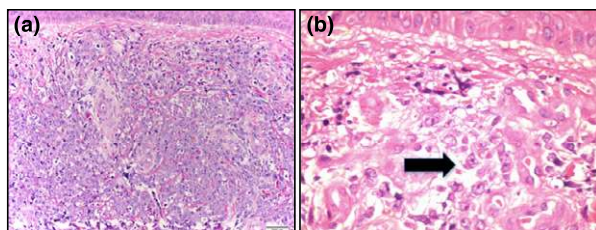


Figure 2 Histological Staining. (a) Dense infiltrate in corium with immunoblast like cells. (b) Dermis with infiltration of immunoblast like cells (arrowhead).

and bulked chromatin nuclei with prominent-centred nucleoli (Fig. 2b). Immunohistochemical stainings were positive for MUM1 and CD138 and negative for CD20 and CD3. EBV/EBER analysis was also positive with a proliferation index MiB1 of over 80%.

The dermal pathological findings correlated with a plasmoblastic lymphoma. Computed tomography staging diagnostics was then performed and demonstrated liver, lung and abdominal lymph nodes involvement. Moreover, EBV activation was detected in blood and tissue samples. Plasmoblastic lymphoma in Ann Arbor stage III was diagnosed. Systemic chemotherapy with CHOEP (cyclophosphamide, doxorubicin, vincristine, etoposide and prednisolone) was applied five times.

Plasmoblastic lymphoma is a rare and high aggressive lymphatic neoplasia, mostly EBV associated in HIV-immunocompromised patients. Immune activation of EBV-infection may play an important role in the lymphocytic proliferation. In our patient, an HIV infection with immunodeficiency and AIDS event may have triggered an EBV reactivation which therefore might be crucial for the genesis of the herein described case report of plasmoblastic lymphoma.

Common localizations are the oral and gastrointestinal mucosa or lymph nodes, as shown in the report of Castillo *et al.*¹ Skin manifestations are rare, can, however, be the first presentation of this aggressive systemic disease. Therefore, in HIV patients with newly occurred skin lesions, a promptly consultation with a dermatologist is recommended.

This neoplasm is characterized by rapid progression and unfavourable prognosis. Single cases reported survival of patients for more than 15 months, mostly in HIV patients upon initiation of an antiretroviral therapy. In our patient, although a complete remission never occurred after an initial partial response, a stable disease was reached during the following five years until up-to-date.

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References

- 1 Castillo J, Pantanowitz L, Dezube BJ. HIV-associated plasmablastic lymphoma: Lessons learned from 112 published cases. *Am J Hematol* 2008; **83**: 804–809.

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