

Plasmablastic Lymphomas of the Oral Cavity: About a Case

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Abstract

Plasmablastic lymphoma is a variant of diffuse large B-cell lymphoma, observed mainly in the oral cavity in the immune compromised. Pathologists poorly recognize plasmoblastic lymphoma, in part because of its relatively rare appearance and unusual immunophenotype.

We admitted a 63-year-old patient with a history of ischemic stroke 6 years ago to supplement the management of recurrent non-Hodgkin's lymphoma a (NHL). A biopsy for pathological confirmation is requested and results as follows: Immunohistochemical profile in favor of plasmoblastic lymphoma (Tumor cells are of a lymphoid nature weakly expressing the leukocyte common antigen LAC-B117PD7/26-DAKO, antibodies anti-CD138 expressed diffuse, anti-CD20, CD3, CD5, CD10, CD30 negative, anti-cytokeratin antibodies AE1 negative, anti-HMB45 negative The proliferation index Ki67: 60%. Magnetic resonance imaging found: a residual polylobed tumoral mass of 41 × 17 mm attached to the level of the tongue's brake, then infiltrating the floor to the level of digastric muscles pouring right after administration of contrast medium. He has benefited from 6 cures of chemotherapy with the DAEPOCH protocol, first cure on 13/09/2017 and sixth on 27/12/2017. The reassessment report showed a good clinical response on the end-of-treatment CT scan on 15/01/2018. The patient presents himself 6 months later with another local recurrence. It benefits from radiotherapy on the oral floor at the dose of 40 gray. The plasmoblastic lymphomas represent a distinct new subtype among diffuse large B cell lymphomas. The individualization of this new class of lymphoma provides a solid foundation for other molecular analyzes to define its pathogen.

Keywords: Non hodgkin lymphoma; Tongue; B-cell neoplasms

Abbreviations: CHOP: Cyclophosphamide Hydroxydriamycine Oncovin Eprednisolone; DAEPOCH: Etoposide+Prednisone+Vincristine+Cyclophosphamide+Doxorubicin

Introduction

Plasmablastic lymphoma is a variant of diffuse large B-cell lymphoma, observed mainly in the oral cavity in the immunocompromised patient. Plasmablastic lymphoma is strongly associated with human immunodeficiency virus (HIV) infection, but has been reported in seronegative individuals. It has been described for the first time by Delacuse et al. [1-8]. Pathologists poorly recognize plasmoblastic lymphoma, in part because of its relatively rare appearance and unusual immunophenotype. Immunophenotypy is characterized by low expression of CD19, CD20 and CD45 antigens by B cells and strong expression of CD38 and CD138 antigens by plasmocyte cells [9-13]. The treatment of plasmoblastic lymphoma is not standardized. Several therapeutic approaches have been proposed and the results remain modest.

Observation

We admitted a 63-year-old patient with a history of ischemic stroke 6 years ago to supplement the management of recurrent non-Hodgkin's lymphoma (NHL). The beginning of the symptomatology would go back to about 3 years by a painless sublingual swelling and gradually increasing in size. The patient consults in India (September 2015) where a total excisional biopsy is performed and the histopathological analysis concludes with stage I T/NK lymphoma and the patient put under chemotherapy type CHOP (3 cycles) with good control.

The patient has a local recurrence 2 years later (January 2017) and is supported in Morocco. A new biopsy for pathological confirmation is requested and results as follows: Immunohistochemical profile in favor of plasmoblastic lymphoma (Tumor cells are of a lymphoid nature weakly expressing the leukocyte common antigen LAC-B117PD7/26-

DAKO, antibodies anti-CD138 expressed diffuse, anti-CD20, CD3, CD5, CD10, CD30 negative, anti-cytokeratin antibodies AE1 negative, anti-HMB45 negative The proliferation index Ki67: 60%. Magnetic resonance imaging found: A residual polylobed tumoral mass of 41 × 17 mm attached to the level of the tongue's brake, then infiltrating the floor to the level of digastric muscles pouring right after administration of contrast medium (Figure 1). It has a tissue consistency, mixed, solid with thick walls, irregular and iso intense in T2 and hyper intense T1 + injection of contrast medium. The pre-chemotherapy check-up was normal and the HIV, hepatitis B and C serologies were negative. He has benefited from 6 cures of chemotherapy with the DAEPOCH protocol, first cure on 13/09/2017 and sixth on 27/12/2017. The reassessment report showed a good clinical response on the end-of-treatment CT scan on 15/01/2018.

It is sent to radiotherapy for additional support. The patient presents himself 6 months later (for lack of financial means) with another local recurrence (Figure 2). It benefits from radiotherapy on the oral floor at the dose of 40 gray, 2 gray per fraction in 20 sessions, 5 weeks a week, X photons (6 and 18MV) from 13/07/2018 to 17/08/2018 or 34 days with good clinical tolerance.

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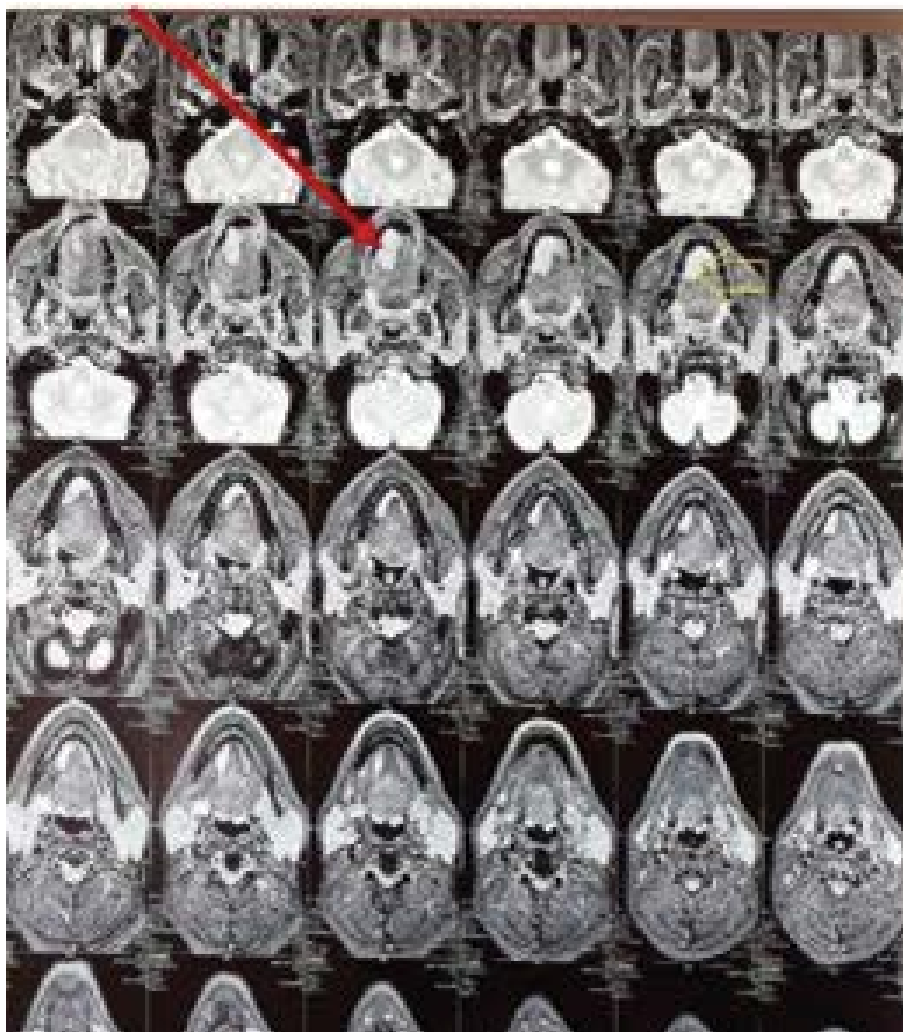


Figure 1: IRM cervico facial T2 montrant la masse rattachée au niveau du frein de la langue.



Figure 2: Iconographie de la masse.

Discussion

Plasmablastic lymphoma is a very rare entity and its histopathological diagnosis is difficult. Elderly people are the most affected, especially those over the age of sixty, and the sex ratio (male/female) is 5: 3 [6].

In addition, very few cases reported in the literature, few signs and symptoms also characterize this disease, the symptoms were mainly a mass of the tongue associated with progressive dyspnea and/or dysphagia [13] rather symptoms such as weight loss, night sweats and fever. In our case it was mainly the mass associated with discomfort during chewing. The oral floor itself appears to be an extremely unusual location for patients with isolated non-Hodgkin's lymphoma. After tissue biopsy, histopathological and immunohistochemical analyzes are required to confirm a diagnosis of plasmablastic lymphoma. Non-Hodgkin's lymphoma of the oral cavity also seems to be quite sensitive to radiotherapy and chemotherapy [1].

The prognosis of lymphoma is related to the stage of tumor and aggressiveness of the malignant cell type and the response to treatment

- Our patient was treated with chemotherapy (DAEPOCH type), but had time to progress before the start of his radiotherapy.

Plasmablastic lymphoma is a rare form of lymphoma, very aggressive, with an overall survival of 12 to 22 months

- There is no standardized treatment. Several chemotherapy protocols have been proposed but their efficacy is controversial [1]. In the reported case, the treatments carried out were not effective, with two evolutionary recoveries according to the data of the literature

Conclusion

The morphological, immunophenotypic and clinical features described strongly suggest that plasmablastic lymphomas represent a distinct new subtype among diffuse large B cell lymphomas. The individualization of this new class of lymphoma provides a solid foundation for other molecular analyzes to define its pathogen.

Ethics Approval and Consent to Participate

Written informed consent was obtained from the patient and her family for publication of this case report and any accompanying images.

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