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Case report

CHOP-treated Mammary Non-hodgkin's Malignant Lymphoma in a Female Patient with HIV + On Retroviral Treatment - Case Report

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Summary

HIV infection greatly increases the risk of developing lymphoma. NHL is present in approximately 3% of the HIV-positive population at the time of their HIV diagnosis. Twenty percent of HIV-positive patients develop NHL. Risk factors for an association of the NHL with HIV include: low CD4 T cell count, high viral load, age, and male.

We report the case of a 35-year-old mother of three children having a history of the death of the husband following the neurological complications of AIDS, the patient was subsequently diagnosed with HIV + and then placed on retroviral treatment. After 6 months the patient reported a breast swelling with pelvic pain, a breast biopsy performed showing a large B-cell NHL.

The extension assessment reveals localizations: mammary, bilateral ovarian and adrenal right of a lymphomatous process, the BOM is normal and the CD4 rate is 517 / mm3. CHOP-type systemic chemotherapy with intrathecal chemotherapy has been initiated. The post-treatment evaluation was in favor of a complete clinical and radiological response.

The prognosis of patients with AIDS-related lymphoma is associated with the stage of the disease, extraganglionic involvement including bone marrow, CD4 cell count, and performance status. Median survival varies from 8 to 20 months, which remains much lower than that of non-HIV-associated lymphomas.

Keywords: ***large B-cell NHL, breast, CHOP, HIV+.***

Introduction

HIV infection greatly increases the risk of developing lymphoma. NHL is present in approximately 3% of the HIV-positive population at the time of their HIV diagnosis. Twenty percent of HIV-positive patients develop NHL. Risk factors for association of the NHL with HIV include: low CD4 T cell count, high viral load, age, and male.

Clinical Case

We report the case of a 35-year-old mother of 3 children with a history of the death of the husband following neurological cerebral complications of AIDS, the patient was subsequently diagnosed with HIV + and then placed on retroviral therapy. After 6 months the patient reported a breast swelling with pelvic pain, a breast biopsy performed showing a large B-cellNHL.

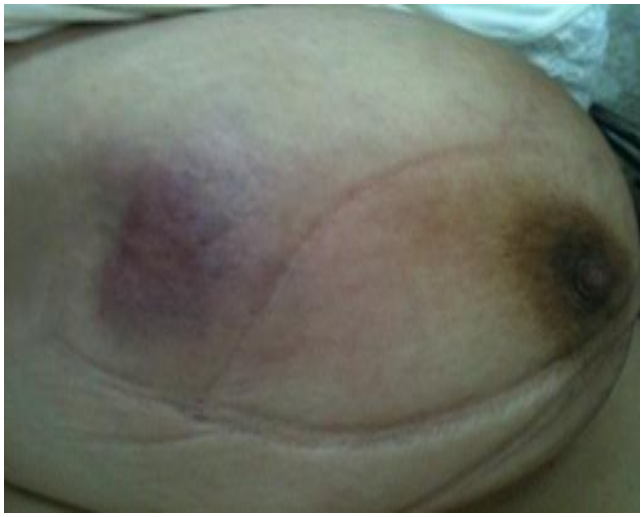

Figure 1: Image of the breast at the clinical examination.

The extension assessment reveals localizations: mammary, bilateral ovarian and adrenal right of a lymphomatous process. The BOM is normal and the CD4 rate is 517 / mm3.

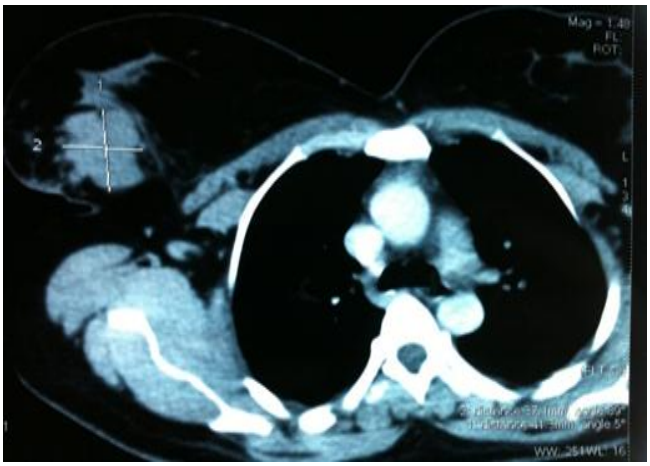

Figure 2: mammary lesion on the CT scan.

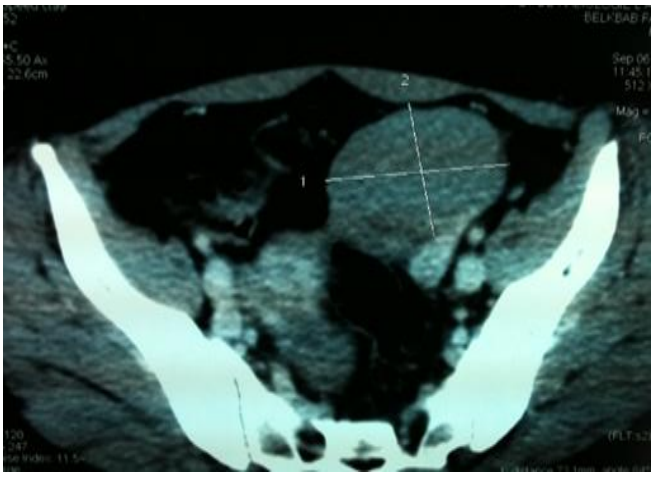

Figure 3: ovarian lesion on the CT scan.

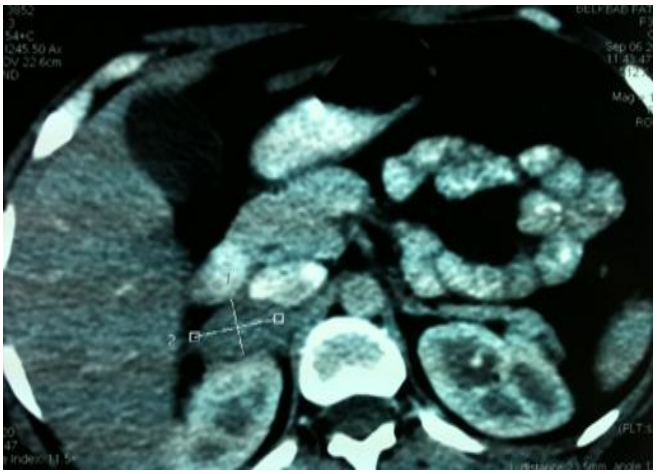

Figure 4: adrenal lesion on the CT scan.

CHOP-type systemic chemotherapy with intrathecal chemotherapy has been initiated. The evaluation after 4 courses was in favor of a complete clinical and radiological response.

Discussion

NHLM appear around age 60 in the general population and their incidence increases with age. The incidence of LMNH increased by a factor of 2.5 between 1980 and 2000 in the general population. But, in HIV, they appear in much younger subjects. These are, today, the most commonly observed lymphomas (about 2/3 of cases) in HIV with a risk 200 times higher than the general population. It is an exacerbated proliferation of B cells, the cells responsible for producing antibodies.[1]

The most common lymphomas in people living with HIV are Burkitt lymphoma (affecting B lymphocytes) and diffuse large cell lymphomas (affecting T or B lymphocytes). B-cell lymphomas remain the leading cause of death for people living with HIV. There is a direct link to the number of CD4s. The more immunocompromised the person is, the more likely they are to develop lymphoma.[2]

The incidence of lymphoma at CD4 is 15 times higher than normal for people with more than 350 CD4, and 250 times higher for people with less than 50 CD4.[3]

The standard chemotherapy remains the CHOP protocol (every 14 or 21 days).[4,5] The use of hematopoietic growth factors must be wider than in non-HIV patients. The combination of a monoclonal anti-CD20 antibody, Rituximab, with chemotherapy with CHOP (R-CHOP) has demonstrated its superiority in patients over 60 years of age who are not HIV positive.

This combination has been tested in HIV-positive subjects in two trials with discordant results: the ANRS trial 085[6] showed very satisfactory results in patients with CD4 greater than 200 / mm3 and an IPI score of less than 2. On the other hand, it gives still insufficient results in patients with these criteria of poor prognosis.[7-9]

The North American AMC O10 trial does not show any benefit from the addition of rituximab and additional deaths from bacterial infections in patients with less than 50 CD4 / mm3.[8]

Conclusion

The prognosis of patients with AIDS-related lymphoma is associated with the stage of the disease, extraganglionic involvement including bone marrow, CD4 cell count, and performance status. Median survival varies from 8 to 20 months, which remains much lower than that of non-HIV-associated lymphomas.

References

[1] M. Frisch, RJ Biggar, EA Engels, JJ Goedert. Sida-Cancer Study Group match registre. . Association du cancer liées au SIDA immunosuppression chez les adultes JAMA. 2001; 285:1736-45.[PubMed: 11277828].

[2] B. Agarwal, U Ramanathan, N Lokeshwar, R Nair, R Gopal, K Bhatia, et al. Néoplasmes lymphoïdes de personnes séropositives en Inde. J Acquir Immune Defic Syndr. 2002; 29:181-3.[PubMed: 11832689].

[3] C. Besson, Goubar A, J Gabarre, Rozenbaum W, Pialoux G, FP Châtelet, et al. . Modifications au lymphome lié au sida depuis l'ère de la thérapie antirétrovirale hautement active. Sang 2001; 98.:2339-44 [PubMed: 11588028].

[4] H. Tilly, E Lepage, B Coiffier et al. Groupe d'étude des lymphomes de l'adulte. Intensive conventional chemotherapy (ACVBP regimen) compared with standard CHOP for poor-prognosis aggressive non-Hodgkin lymphoma Blood, 2003, 102: 4284-4289.

[5] N. Mounier, M Spina, J Gabarre et al. AIDS-related non-Hodgkin's lymphoma: final analysis of 485 patients treated with risk-adapted intensive chemotherapy. Blood, 2006, 107: 3832-3840.

[6] F. Boue, J Gabarre, C Gisselbercht et al Phase II trial of CHOP plus rituximab in patients with HIV-associated non- Hodgkin's lymphoma. J Clin Oncol 2006, 24: 4123-4128.

[7] JM. Ribera, A Orlol, M Morgades et al. Safety and efficacy of cyclophosphamide, adriamycin, vincristine, prednisone and rituximab in patients with human immunodeficiency virus-associated diffuse large B-cell lymphoma: results of a phase II trial. Br J Haematol, 2008, 140: 411-419.

[8] LD. Kaplan, JY Lee, RF Ambinder et al. Rituximab does not improve clinical outcome in a randomized phase 3 trial of CHOP with or without rituximab in patients with HIV-associated non-Hodgkin lymphom: AIDS-Malignancies Consortium Trial 010. Blood, 2005, 106: 1538-1543.

[9] M. Frick., Dörken B., Lenz G. New insights into the biology of molecular subtypes of diffuse large B-cell lymphoma and Burkitt lymphoma. Best Pract. Res. Clin. Haematol. 2012; 1:3–12.