

MARGINAL ZONE LYMPHOMA MALT TYPE OF THE LACRIMAL GLAND - A CASE REPORT

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We present the case of a 66 year old women with hepatitis C infection, diagnosed in 2009 with diffuse B cell lymphoma, with complete remission after chemotherapy, who presented with swelling of the left lacrimal gland in 2014. The tumoral mass was surgically removed and the HP and IHC result of the sample established that it was a case of marginal zone lymphoma – MALT type. After further investigations (computed tomography, bone marrow) we concluded that the lacrimal gland was not the only site involved. Treatment with low grade chemotherapy in association with monoclonal antibody against CD-20 achieved a complete remission.

Keywords: marginal zone lymphoma, MALT, lacrimal gland, chemotherapy

INTRODUCTION

Malignant lymphomas are neoplasms derived from clonal proliferations of lymphocytes. They comprise a diverse group of diseases, with more than 40 different subtypes defined in the World Health Organization Classification of Tumours of Haematopoietic and Lymphoid Tissues¹. Both nodal and extranodal forms can occur.

Ocular adnexal (OA) lymphomas (ie, lymphomas of the orbit, eyelids, conjunctiva, lacrimal gland, and lacrimal sac) constitute 2% of all extranodal lymphomas² and are the most common malignant tumors of the orbit³. Most common subtype, accounting for up to 80% of cases of primary ocular adnexal lymphoma, is marginal zone lymphoma of mucosa-associated lymphoid tissue (MALT) type.

Lacrimal gland lymphomas are relatively rare, representing 7% to 26% of ocular adnexal lymphomas.⁴ They are mostly seen in the 5th to 7th decade of life (median age, 65 years), with female predominance (male/female 1:1.5/2).

Few reports in the literature combine information concerning lymphomas of the lacrimal gland and MALT lymphomas, making such cases as rare. Differential diagnosis includes benign lymphoproliferation, such as lymphoid hyperplasia, pseudolymphoma and inflammatory pseudotumor.⁵⁻⁶

CASE REPORT

A 66 year old women, with chronic hepatitis C infection, diagnosed in 2009 with large B cell lymphoma nodular and diffuse pattern, stage II, with complete remission after chemotherapy, presented in our service with swelling of the left lacrimal gland in 2014. She denied any irritation of the eye or xerostomia, and had been asymptomatic otherwise. The right eye was completely normal. We referred her to ophthalmology where the tumoral mass was biopsied in order to diagnose the origin of the tumor (Figure 1). The histopathological and immunohistochemistry results showed a tumoral proliferation with small B cell, diffuse positive for CD20, with clonal characteristics, negative for Cyclin D1 (Figure 2). This result established that it was a case of marginal zone lymphoma – MALT type.



Figure 1 Imagistic aspect of the tumor at presentation

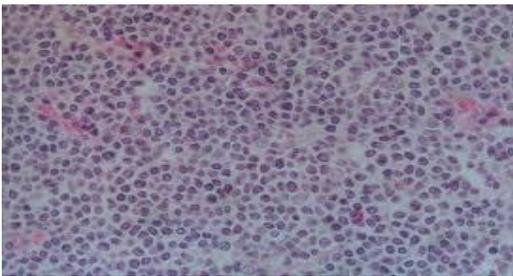


Figure 2. Morphological spectrum of MALT lymphoma cells: small lymphocytes, centrocytoid lymphocytes, plasma cells and scattered transformed lymphocytes throughout the section (H&E x400)¹²

The next step was to see the extend of the lymphoma so we did a bone marrow biopsy – negative for lymphoid infiltration- and a computed tomography (CT) scan of the thoracic-abdominal area which revealed enlargement of the lymph nodes in both sides of the diaphragm. Laboratory evaluation revealed a normal complete blood count, normal liver and renal function.

The patient was staged as III E and we had to decide the treatment. Various treatment modalities are available for the management of patients with this diagnosis, including surgical resection, radiotherapy, single-agent or combination chemotherapy, and immunotherapy with monoclonal antibodies. However, no prospective clinical trials have been conducted to evaluate these therapeutic options or define the optimal treatment approach for these patients. Recently, antichlamydial antibiotic therapy was also proposed as a novel treatment option, taking into consideration the implication of *Chlamydia psittaci* infection in the pathogenesis of ocular MALT lymphoma. Our patient tested negative for Chlamydia infection. We decided to use a combination chemotherapy. At first, a milder one – CVP (Cyclophosphamide, Vincristine, Prednisolone). After 4 cycles of treatment we obtained a stable disease, so we decided to switch with a more aggressive chemotherapy–CHOP (Cyclophosphamide, Vincristine, Doxorubicin, Prednisolone) in association with central nervous system (CNS) prophylaxis and monoclonal antibody–Rituximab (R). She received 4 cycles of CHOP obtaining a partial response to this line of therapy. Taking into consideration the age of the patient, the cardiotoxicity of the doxorubicin and the poor tolerance of this type of treatment, we decided to continue the therapy with R-CVP regimens and CNS prophylaxis. At the most recent evaluation of the disease (September 2015) the patient was considered to have obtained a complete response (CT scan showed no more infiltration of the lacrimal gland and no more enlarged lymph nodes).

She continues treatment in order to maintain response with every two months Rituximab applications.

RESULTS AND DISCUSSIONS

The eyelids, conjunctiva, orbital connective tissue and lacrimal structures have all proved to be potential sites of a spectrum of lymphoproliferative disorders, constituting one of the most unpredictable groups of lesions encountered in clinical haematology. In the stroma of the above tissues lies a resident population of lymphocytes, which are not organized into follicular structures. These may give rise to extranodal lymphomas⁷⁻¹⁰.

In organs normally devoid of MALT, lymphoid tissue may be acquired as a result of chronic inflammatory or autoimmune disorder. Previous reports disagree as to whether MALT lymphoma can occur as a primary disease, or as both a primary and secondary disease in the ocular adnexa¹¹. It is, however, agreed that patients with primary ocular adnexal lymphoma have a better outcome than those with secondary disease.

Ocular adnexal MALT lymphomas in general have a tendency to remain localized for prolonged periods and, when they do disseminate, the site of recurrence is another typical MALT site¹¹. Prognosis is closely related to the clinical stage at presentation, patients with disseminated disease having worse prognosis than those with localized disease¹². Although not observed in larger studies, a recent smaller series suggested that lacrimal gland lymphoma presents a greater risk of subsequent systemic disease than orbital disease¹³.

Like non-Hodgkin lymphomas (NHL) in other sites, surgery alone should not be employed as the main treatment of MALT lymphoma of the OA; radiation therapy has been reported to be very effective in MALT lymphoma of the OA. It has been reported that combination chemotherapy is effective in orbital MALT lymphoma. However, because of the small number of patients who received chemotherapy alone, it is difficult to comment on the results of combination chemotherapy for advanced disease. All therapeutic strategies are associated with unique short- and long-term efficacy and toxicities, which need to be carefully weighed. The final treatment decision requires a multidisciplinary approach, taking into account the extent of the disease, the impact of the lymphoma on the eye and visual function, and finally patient and disease-related prognostic factors¹⁴. Long-term follow-up is needed to understand the full spectrum of this unusual type of lymphoma.

MALT lymphomas of the OA remains a rare disease, predominantly affecting women in the 5th to 7th decade, with an indolent, mostly asymptomatic course and frequently limited to the eye area, without extension to other lymphoid areas.

CONCLUSIONS

We have reported a rare case of a malignant lymphoma of MALT type, classified as an indolent NHL, presenting in the lacrimal gland in a patient previously diagnosed with large B lymphoma, an aggressive NHL. Low-grade chemotherapy was successful in eradicating the lymphoma with minimal morbidity. The evolution of this case is sort of unique, as usually the low grade lymphoma can evolve into an aggressive one.

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