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Case Report

Mucosa-Associated Lymphoid Tissue Lymphoma at Parotid Gland

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Introduction

MALT (Mucosa-Associated Lymphoid Tissue) lymphomas are low-grade extra nodal B-cell lymphomas that may involve various sites in the head and neck including the thyroid, salivary, and lacrimal glands [1]. Development of MALT lymphoma in the head and neck is often associated with autoimmune diseases such as Sjögren syndrome or Hashimoto thyroiditis [2].

Salivary MALT lymphomas are typically associated with an inflammatory or autoimmune process. Recently, the term Lymphepithelial Sialadenitis (LESA) has been proposed to describe the inflammatory or autoimmune process [3]. In this article, we present a case of MALT lymphoma affecting the parotid gland.

Case presentation

A 66-year-old female who found a painless lump in her left cheek that had at the time been presented for six months. Physical examination revealed a firm, well-defined mass measuring 1.5 X 1.5 cm at the left buccal space. Patient was diagnosed as Sjögren syndrome for 10-years earlier. The basis for that diagnosis was dry eyes, xerostomia, and elevated serum antinuclear antibody titers. (Antinuclear antibody: 5120X+). The computer tomography scan showed a homogeneous enhancement. Solid, well encapsulated mass (Figure 1A and B) in the left side of the masseter muscle and the accessory lobe of parotid gland of anterior part. The blood test data were within the normal ranges. Under the suspicion of a pleomorphic adenoma, tumor total excision was performed on January 23, 2008. Microscopically, showed a uniform, monotonous, atypical lymphoid population, Immunohistolchemical stains for CD20 and CD43 (B-cell markers) showed more than a 95% membrane-staining pattern for neoplastic cells (Figure 1C and D). These findings were suggestive to be Low-grade MALT lymphoma of parotid gland. Bone marrow biopsy was done after the diagnosis. Lymphoma tumor

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cells can found in bone marrow specimen, total of six courses of chemotherapy after surgery were performed sequencing. The patient was successfully treated with local excision and systemic chemotherapy and remained disease-free survival during the 10-years follow-up.

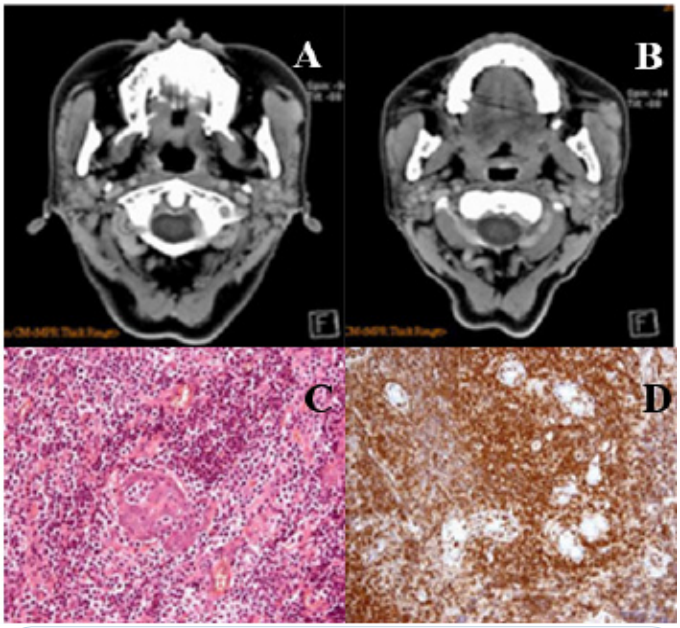

Figure 1: (**A**) The computer tomography showed a homogeneous enhancement. solid, well-encapsulated mass (Arrow). (**B**) Which located in the left side of the masseter muscle and the anterior part of parotid gland (arrow). Microscopically, showed a monocytoid cells with atypical lymphoepithelial lesion present was noted and uniform, monotonous, atypical lymphoid population. (**C**) (Hematoxylin and Eosin, x200) Immunohistochemical stain for CD43 (B-cell markers) showed more than a 95% membrane strong positive staining pattern for neoplastic cells (**D**) (x200).

Discussion

Historically, MALT presented a monotonous population of atypical lymphocytes in extra nodal sites, especially in the background of chronic inflammation (Myoepithelial Sialadenitis (MESA), usually in association with Sjögren syndrome, should raise the suspicion for MALT lymphoma [4]. MALT lymphoma is slow growing, has a tendency to remain localized for a long time, and generally has an excellent prognosis.

Diagnosis should include a complete blood count including cell differential, platelet count, and serum biochemistry; in most cases, fine needle aspiration can confirm the diagnosis.

The methods of confirming the diagnosis include fine needle aspiration cytology of salivary glands, and there are also auxiliary diagnosis methods using flow cytometry and immunohistochemistry some authors believe that demonstration of B-cell clonality in the lymphoepithelial lesion is diagnostic of lymphoma. Mucosal-Associated Lymphoid Tissue Lymphoma It is an atypical B-lymphocyte, histopathological The slices showed uniform and monotonous atypical lymphoid composition, and centrocyte-like cells, monocyte-like cells, scatted immunoblasts and centroblast-like cells were found in the infiltrating part outside the lymph nodes, and these cells were mainly composed of plasma cells Lymphoepithelial lesions are formed when lymphoma cells infiltrate epithelial cells.

Other examinations like tissue immunostaining can find that CD20 and CD43RA (B cell markers) have 95% staining performance. In addition, CD10 and cyclin D1 have no staining performance. These staining results confirm the diagnosis of marginal zone B-cell lymphoma.

According to the Zinzani who reported a retrospective study that included 45 cases of head and neck MALT lymphoma treated with various combinations of chemotherapy, radiation therapy, and surgery. Overall, they found a complete treatment response was 79% of the cases, with no cause-specific mortality during a median follow-up of 47 months. The overall recurrence rate was estimated to be 30% at 5 years [5].

Conclusion

MALT lymphoma is a rare disease affecting the parotid region. The optimal treatment for localized disease has not been well established. Local excision is the first treatment option. Post-operative systemic chemotherapy should depend on the bone marrow biopsy results. Long-term regular follow-up. Is advocated. The patient, presented with MALT lymphoma at the parotid gland, was still alive 10 years after surgical treatment and chemotherapy.

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