B-cell non-Hodgkin’s lymphoma presenting as tongue tumor

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Abstract

Introduction: When located in the oral cavity, the giant B-cell non-Hodgkin’s lymphoma is a rare neoplasm. Its occurrence is not associated with either gender in particular and affects patients with an average age of between 50 and 60. Its distinctive features are nonspecific ulcerative lesions that do not heal. The case report concerns an elder patient diagnosed with a giant B-cell NHL located in the tongue. Case Report: Patient aged 86, male, sought aid at emergency room complaining from macroglossia and local pain. Physical examination revealed an increase in the volume of the tongue, besides hardening in the anterior third. A biopsy was carried out and the diagnosis was diffuse large B-cell lymphoma. Discussion: NHL appearing in the head and neck show symptoms similar to those of squamous cell carcinoma (tumor mass or cervical lymphadenopathy); however, as the types of treatment for these two malignant neoplasms are highly different, differential diagnosis is extremely important. Keywords: lymphoma; diffuse, large B-Cell, Lymphoma; Lymphoma, non Hodgkin; tongue neoplasms.

Introduction

Primary non-Hodgkin’s lymphoma (NHL) of the tongue is very rare and accounts for 3% to 5% of all lymphoma subtypes, which corresponds to 1% of malignant tumors of the oral cavity1,3. Regarding epidemiology, they do not show a predilection for gender, affecting mostly patients between the fourth and eighth decades of life, with a mean age between 50 and 60 years4. Patients with a subjacent immunodeficiency disorder tend to be younger2.

It is more common to have NHL in the masticatory cavity than the tongue lymphomas. NHL represents the third most common group of malignant lesions of the oral cavity after squamous cell carcinomas (SCC) and salivary gland neoplasms.

The World Health Organization (WHO) classification of hematopoietic and lymphoid tissue tumors provides guidelines for the diagnosis and classification of lymphoma1,2.

Clinical features are nonspecific ulcerative lesions that do not heal1. The prognosis of lymphoma is related to the stage of the tumor and the aggressiveness of the malignant cell type and the response to treatment1. The diagnosis of oral lymphomas can be complicated by...
the low rate of clinical suspicion. Faced with this condition, incisional biopsy is indicated, and the area of choice is judicious so that there are no diagnostic errors. Like lymphomas elsewhere in the head and neck, tongue NHL also appears to be quite sensitive to both radiotherapy and chemotherapy. The case report concerns a patient with a final diagnosis of giant B-cell NHL.

Case report
A 86-year-old male patient sought the emergency room, with complaint of increased tongue volume and local pain for 1 month associated with difficulty in feeding. He said that the increase was progressive, leading to difficulty in swallowing and speech, and denied other comorbidities, smoking or alcoholism. He reported weight loss and hyporexia. Oroscopy presented macroglossia, mainly with an increase of all the anterior third of the tongue, diffuse, hardened, without apparent lesion, being the region painful to the touch (Figure 1). Then an incisional biopsy was indicated for diagnosis, which presented positivity in the following markers: BCL-2, CD20, Ki-67 (in 60% of the nuclei) and PAX-5, being compatible with diffuse large B-cell lymphoma (Figure 2 and 3). He was referred to the Hematology Department, where he started chemotherapy with COXCIP (rifampicin, isoniazid, pyrazinamide and ethambutol), rituximab, CHOP (cyclophosphamide 1000mg + adriablastine 50mg + vincristine 2mg) and corticosteroids (prednisone 60mg), with good evolution and total regression of the lesion, with no evidence of relapse after 1 year of treatment initiation.

Figure 1. Macroglossia at physical examination.
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Discussion

NHL located in the tongue can occur being primary or secondary by a dissemination of the same. NHL are a group of highly diverse malignancies and are prone to affect organs and tissues that normally do not contain lymphoid cells. 20% to 30% of NHL originate from extranodal sites. 

Figure 2. Immunohistochemistry for CD20 with diffuse positivity in the tumor blocks present in the chorion of the lingual mucosa. IH 100X.

Figure 3. Expression of CD20 on the membrane of tumor lymphocytes. IH: 400X.
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NHL that arise in the head and neck often exhibit symptoms similar to those of CPB, that is, a tumoral mass or cervical lymphadenopathy; however, as the treatment modalities for these two malignant neoplasms are highly different, clinically the differential diagnosis is very important5. The gold standard of diagnosis for these types of tumors is the incisional biopsy through immunohistochemistry and its markers1-5.

In this report the markers were found: BCL-2, CD20, Ki-67 (in 60% of the nuclei) and PAX-5, confirming the diagnosis and according to the frequency of phenotypes in the literature5. However, the report presents a case with a rare incidence and an effective treatment. Therefore, corticosteroid-associated chemotherapeutic therapy was initiated, as found in the literature3-5.

References