

## Non-Hodgkin's Lymphoma of the Hard Palate - A Case Report

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**Abstract:** Extranodal lymphomas constitute about 25% of all lymphomas and head and neck is the second most common site for extra-nodal lymphomas. Palatal and nasal lymphomas are rare, and majority of the lymphomas in this region originate from B cells. We report the case of a Diffuse Large B cell Lymphoma (DLBCL) affecting hard palate in a forty three year old man who was treated with combination chemotherapy and radiation. Considering the rare occurrence of primary DLBCL in oral cavity, it has become essential for an oral physician to be aware of this aggressive lesion to aid in the early diagnosis thereby contributing to an increased life expectancy of these patients.

**Keywords:** Diffuse large B cell lymphoma, Non Hodgkin's lymphoma, hard palate.

### INTRODUCTION

Lymphoma is the second most common primary malignancy occurring in the head and neck. Approximately 2.5% of malignant lymphomas arise in the oral and para-oral region, with Diffuse Large B cell Lymphoma (DLBCL) being the most frequent type. Primary extra nodal lymphoma originating from the hard palate is rare. We present the case of a 43 year old man with this entity.

### CASE REPORT

A forty three year old man presented with pain and swelling in the hard palate which was gradually worsening for the last two months. Since last 2 weeks patient was unable to tolerate oral feeds. There was no history of toothache, fever, loss of weight, loss of appetite or any other symptom. There was no history of tobacco chewing or cigarette smoking. Patient had good performance status. Examination of oral cavity showed 5 x 4 cm ulcerated infected lesion involving the hard palate extending to the adjacent gingiva. Posteriorly the lesion extends till the junction of hard palate and soft palate (Figure 1).

He had small non-tender mobile lymph nodes at right submandibular and right upper deep cervical region. Other systems were within normal limits. Computed tomography (CT) of head and neck showed focal destruction of frontal process of maxilla, anterior hard palate with minimum soft tissue and few enlarged cervical and axillary lymph nodes (Figure 2). Punch biopsy from the lesion showed atypical cells with moderate amount of cytoplasm and vesicular nuclei and nucleoli. On immunohistochemistry the atypical cells were positive for LCA, CD 20, BCL6 and negative for S 100, pancytokeratin (AE1/AE3), Cyclin D1, Tdt, CD

34. Picture was diagnostic of DLBCL.



Fig-1: Clinical picture showing lesion in the hard palate

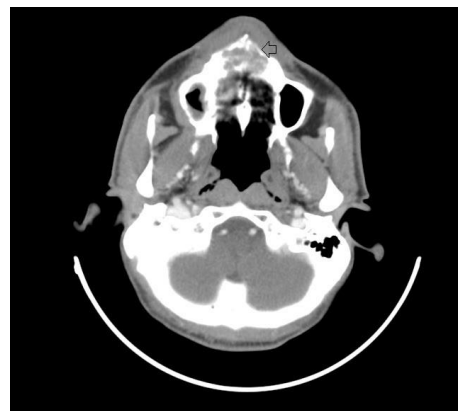


Fig-2: Axial view of the CT scan of paranasal sinus showing focal destruction of frontal process of maxilla and anterior hard palate

His hemoglobin was 13.4 g/dl, total WBC count was 5100/mm<sup>3</sup>, platelet count was 3.53lakhs/mm<sup>3</sup>, and ESR was 80mm/1st hour. His renal and liver functions were normal. Serum calcium was 9.3 mg/dl and serum LDH was 464 IU/L. Bone marrow study and cerebrospinal fluid analysis were normal. CT thorax, abdomen and pelvis were within normal limits. Patient was Staged with IIAE disease and had an International Prognostic Index (IPI) score of 0/5. He received chemotherapy with Rituximab, Cyclophosphamide, Doxorubicin, Vincristine and Prednisolone (R-CHOP) four cycles and achieved complete resolution of the lesion. This was consolidated with involved field radiotherapy.

## DISCUSSION

Lymphoma is the second most common neoplasm of the head and neck region after squamous cell carcinoma (SCC) and the third most common group of malignant lesions of the oral region [1, 2]. The head and neck is the second most common region for the extra-nodal lymphomas after that of gastrointestinal tract [3]. Palatal and nasal lymphomas are rare, and the majority of the lymphomas in this region originate from B cells. DLBCL of oral cavity affects both the osseous and soft tissues, and favored sites include tonsils, palate, and parotid glands [4]. Oral lymphoma often is a component of a disseminated disease process that may involve regional nodes as well. Other times, it may represent a primary extranodal disease confined to oral cavity or jaws, which is very rare.

Eight patients in whom a swelling of the palatal mucosa led to the diagnosis of non-Hodgkin's lymphoma was described by Blok P *et al* [5]. A case of primary DLBCL affecting the anterior part of the hard palate of an elderly male patient was reported [6]. Isolated diffuse type B-cell lymphoma of the palate, in a 28-year-old man was also described.

The palate is a complex area of the mouth, with a variety of native tissue types that give rise to a plethora of pathological conditions, both benign and malignant. The diagnosis of palatal lesions is a challenge for any clinician. Early detection of hard palate tumors is difficult by clinical examination, the vast majority of such tumors are detected after maxillary or sphenoid bone invasion [7]. If bone is the primary site, tooth mobility and alveolar bone loss are often noted. Pain, swelling, numbness of the lip, and pathologically related fractures may be associated with the bone lesion. Radiological imaging is vital for assessment of tumor extension, assessment of bony destruction, evidence of mucosal thickening, and choice of biopsy site and route. CT is the best imaging modality for demonstrating fine bony detail [8]. Treatment of DLBCL is with multiagent chemotherapy, typically CHOP with Rituximab. Early stage disease care involves combination of chemotherapy and radiotherapy. A proper clinical evaluation, histology as

well as immunohistochemical evaluation of biopsy specimen may aid in early diagnosis and effective management.

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