



## Diffuse B-Cell Non Hodgkins Lymphoma of Palate- A Case Report

### KEYWORDS

ORAL CAVITY LESION , PALATE, NHL , DLBCL

### Dr.vidyanand Pandit

PG 3rd YR DEPARTMENT OF  
PATHOLOGY GAJRA RAJA  
MEDICAL COLLEGE ,GWALIOR

### Dr.Iti Jain

PG 1st YR DEPARTMENT OF  
PATHOLOGY GAJRA RAJA  
MEDICAL COLLEGE ,GWALIOR

### Dr.Rajesh Gaur

Professor and head , GAJRA RAJA  
MEDICAL COLLEGE GWALIOR,  
M.P

**ABSTRACT** *Palatal Swellings pose a diagnostic challenge for Pathologists.They are mostly misinterpreted as lesions of inflammatory often presenting with prominent superimposed nonspecific inflammation. NHL frequently occurs as extranodal lesion in head and neck,but is a rare entity in Palate.We present a case of isolated B Cell NHL of Hard Palate in a 70 year old male.The patient had no other systemic complaints except a painless swelling on Hard Palate since 1 year. FNA showed features of NHL.Histopathological and Immunocytochemical analysis of biopsied tissue confirmed the diagnosis of Diffuse Type B-Cell NHL.We present this case because it is a rare entity and it is important for Pathologists to be familiar with features that distinguish benign from malignant lymphoid proliferations.*

### INTRODUCTION

Lymphomas are malignant neoplasm of the lymphocyte cell lines. They are mainly classified as either Hodgkin's or Non-Hodgkin's lymphoma(NHL). NHL comprises a heterogeneous group of lymphoid neoplasm with a spectrum of behavior ranging from relatively indolent to highly aggressive and potentially fatal<sup>1</sup>. NHL is a heterogeneous group of malignancies characterized by an abnormal clonal proliferation of T cells, B cells, or both. The majority of the adult NHLs are of B cell origin<sup>2</sup>. Palatal and nasal lymphomas are rare, and the majority of the lymphomas in this region originate from B cells. Since 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<sup>3</sup>. Non-Hodgkin's lymphomas are a group of highly diverse malignancies and have a strong tendency to affect organs and tissues that do not ordinarily contain lymphoid cells. The present report showed a case of B cell lymphoma in a 70-year-old male patient manifested as a soft tissue mass on the hard palate.

### CASE REPORT

A 70 years old male visited to the Department of Otolaryngology with a complaint of painless, slowly growing mass in oral cavity, since more than 1yr. On examination, there is no swelling or tenderness over face. Intraoral examination revealed a well defined growth over hard palate, measures 3.5 X2.0 cm, with central reddish area. The growth was non-tender on palpation, oral hygiene was poor. On general examination, no lymph nodes were palpable. There was positive history of long term tobacco chewing. There was no history of Diabetes or Hypertension or any other systemic illness.

The clinical differential diagnosis included the most common malignancies in the oral cavity such as Squamous Cell Carcinoma (SCC), minor salivary gland tumor, and carcinoma of the maxillary sinus.

The patient was routinely investigated. Complete Blood Counts were within normal limits. Peripheral Blood smears show normal White blood counts & morphology. FNA was done in our Department, which showed features of Non Hodgkins Lymphoma. CT SCAN was done, revealed

moderate size heterogenous soft tissue density with bony destruction involving hard palate, right maxillary antrum & nasal cavity and superior alveolar sockets, suggestive of NEOPLASTIC etiology. Punch Biopsy of the lesion was done and tissue was sent for histopathological analysis. Sections revealed Lymphoma cells, replacing the normal architecture of underlying extranodal tissue in a diffuse pattern. Lymphoma cells are large with relatively abundant cytoplasm and irregular nuclei and prominent nucleoli. Immunohistochemically, the tumour cells were positive for pan B cell markers CD 20 + , CD 45+. Finally, the diagnosis of Diffuse Large B cell Non Hodgkins Lymphoma was made.

### DISCUSSION

Non Hodgkins Lymphoma are a group of highly diverse malignancies and have a strong tendency to effect organs and tissue that do not ordinarily contain lymphoid cells. The cause of NHL is still unclear. Viruses have been suggested as a potential cause of the disease. An increased rate of lymphoma in patients who are congenitally immunosuppressed and in patients who receive immunosuppressive therapy has been reported<sup>4</sup>. 24-84% of NHLs arise from extra nodal sites. The head and neck is the second most common sight for extra nodal lymphoma after the gastro intestinal tract<sup>5</sup>. NHL is the second most common neoplasm of the head and neck region after SCC and the third most common group of malignant lesions of the oral region after SCC and salivary gland neoplasm. NHL commonly involves oropharyngeal lymphoid tissue comprising Waldeyer's ring, but occasionally involves other oral tissues. Head and neck involvement is generally in paediatric age group, but our patient is 70 years old. Sinuses are the primary site of NHL in 90% of the cases, most commonly invaded by diffuse large B cell lymphoma, in our case patient shows bony destruction in CT SCAN, which is common in such lesion. Lymphomas are usually submucosal, and on gross appearance, differ from SCC which is usually ulceroproliferative, in our case is ulceration absent. Cytological study and biopsy should be performed to ensure the accurate diagnosis and histological grading of lymphoma.

In conclusion, this report focused on to show the importance for Pathologists to be familiar with features that

distinguish benign from malignant lymphoid proliferations and other oral cancers, because of clinically doubtful lesions, which are essential for early diagnosis and better treatment planning.

FIGURES



FIGURE 01: GROWTH IN A HARD PALATE

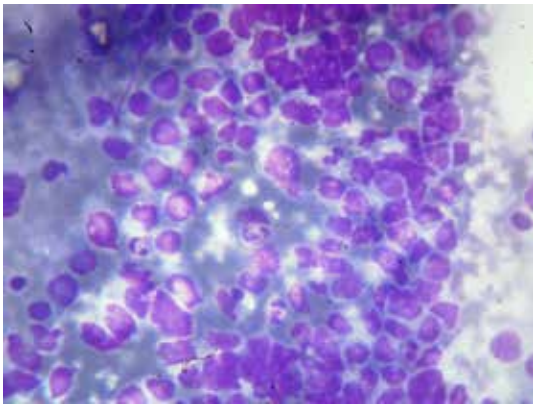


FIGURE 02: SMEAR SHOWING SHEETS OF LARGE TUMOUR CELLS WITH SCANT TO MODERATE AMOUNT OF BASOPHILIC CYTOPLASM(X400 MGG)

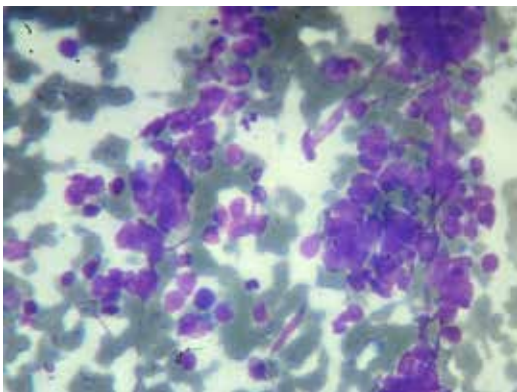


FIGURE 03: CLUSTERS OF PLEOMORPHIC CELLS WITH SCANTY CYTOPLASM AND IRREGULAR NUCLEAR BORDER AND OCCASIONAL DENDRITIC CELLS (X400, MGG)



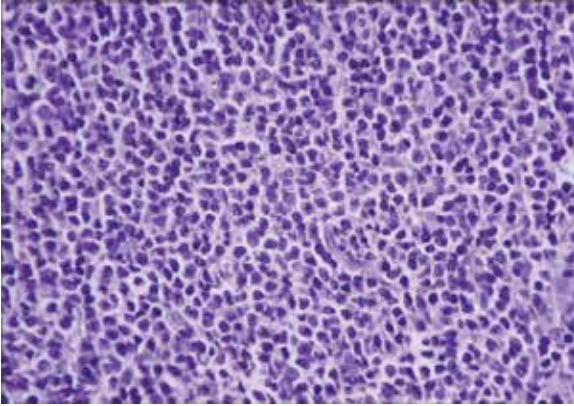
FIGURE 04: CT SCAN SHOWING GROWTH INVOLVING RIGHT MAXILLARY SINUS



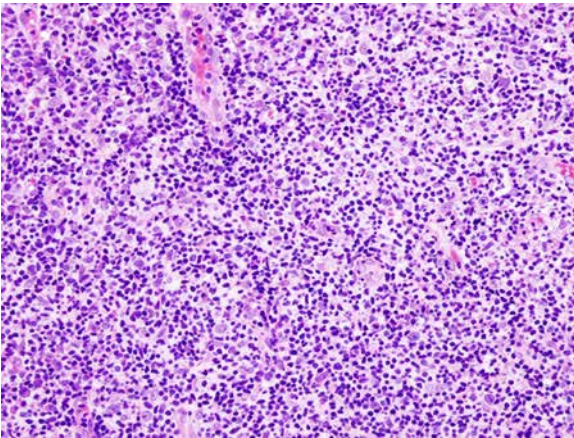
FIGURE 05: SAGITTAL SECTION SHOWING GROWTH INVOLVING HARD PALATE.



FIGURE 06: CT SCAN SHOWING MASS INVOLVING RIGHT MAXILLARY SINUS AND ANTRUM CAUSING

**BONY DESTRUCTION.**

**FIGURE 07:SECTION SHOWING SHEETS OF LARGE PLEOMORPHIC CELLS HAVING BASOPHILIC CYTOPLASM AND IRREGULAR NUCLEAR BORDER (X10 H&E)**



**FIGURE 08:SECTION SHOWING LARGE CELLS FULLY REPLACING THE NORMAL ARCHITECTURE OF EXTRA NODAL TISSUE**

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