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A Case of Isolated Plasmacytoid Lymphoma Presenting as Hard Palate Mass: A Case Report

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ABSTRACT

Plasmablastic lymphoma (PBL) is classified under the category of 'Mature B-cell neoplasms'. Plasmablastic lymphomas are the most common and account for 30% of all the cases type. PBL is an uncommon B-cell tumor which is limited to the jaw and oral cavity at presentation but can spread to distant sites at later stages type. Here we case report a 35 year old male presented to OPD as hard palate mass which turns to plasmablastic lymphoma after investigation.

Keywords: *Plasmablastic Lymphoma (PBL), Triglycerides (TG), Low density lipoproteins (LDL).*

INTRODUCTION

Lymphomas originate as somatic mutations in lymphocyte progenitor cells (B-cells, T–cells, or both) and are classified as Hodgkin's and non-Hodgkin's lymphomas. According to WHO 2016 revised classification of lymphoid neoplasms, Plasmablastic lymphoma (PBL) is classified under the category of 'Mature B-cell neoplasms'[1].

Plasmablastic or large B-cell lymphomas are the most common type and account for 30% of all the cases type[2]. They are diffused type of aggressive large B-cell lymphomas. PBL have been reported in the both human immunodeficiency virus-positive and -negative patients and the incidence of PBL is 2.6% of all the acquired immunodeficiency syndrome (AIDS) associated NHL[3]. The prevalence of disease-related deaths was 59.6% in oral NHL and the average mean survival is 14 months, which indicates the aggressiveness of the disease[4]. A total of 612 cases have been reported worldwide from 1997 to 2015[5].

Delecluse *et al*. gave the terminology "Plasmablastic Lymphoma", when they reported 16 cases of unusually presenting lymphomas at as the primary tumor sites in the oral cavity such as gingiva, floor of the mouth, palate and tonsil[5]. It often involves the head-and-neck area with other sites, including the nasal cavity, gastrointestinal tract, bone, skin, soft tissue and lungs[6,7] . PBL is an uncommon B-cell tumor which at presentation limited to the jaw and oral cavity but can spread to distant sites at later stages. Plasmablastic Lymphoma is categorised by WHO under the category of 'Mature B-cell Neoplasms'[8].

CASE REPORT

35 year old male patient presented in ENT OPD as chief complaints of mass in the mouth for last one month and bleeding from oral cavity for last 1 day. On local examination there was a mass on the right side of hard palate, approximately 3*3 cm, hard in consistency, with smooth surface and non-tender (fig1).

On general physical examination there was no other lymphnodal swelling elsewhere in the body. No other palpable lymphnodes were found in the neck. Patient was smoker and did not consume alcohol. His routine investigations like complete haemogram, fasting blood sugar, liver function test, renal function test and chest x-

ray were normal. USG Abdomen was done and no organomegaly was found. Patient's HIV, HbsAg and anti HbC were non reactive. Then his CECT neck was done. On CECT neck there was aheterogeneously enhancing soft tissue mass lesion (3.3x1.8x2.8cm) involving right sided buccal and gingival mucosa with erosion destruction of maxilla on right side with extension into maxillaryantrum with multiple subcentrimetriclymph node in all neck stations s/o likely malignant etiology (fig.2).

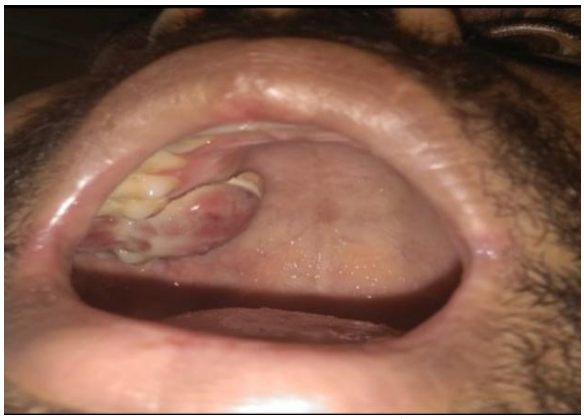

Fig 1: Clinical picture showing smooth surface mass right side hard palate

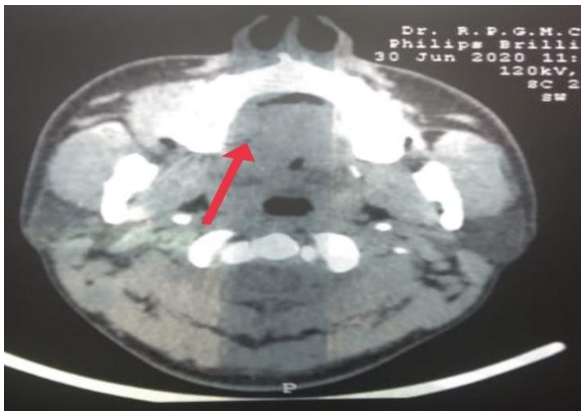

Fig 2: CECT picture showing heterogeneously enhancing leasion in right side hard palate

Then FNAC of mass lesion was done and sent for microscopic examination. On microscopic examination smear comprised of predominantly population of plasmacytoid cells with features suggestive of plasma cell neoplasm. (fig.3)

After FNAC report, patient was referred to higher centre for immunohistochemistry analysis where tumor cells were positive for CD-138, LCA and CD-56.

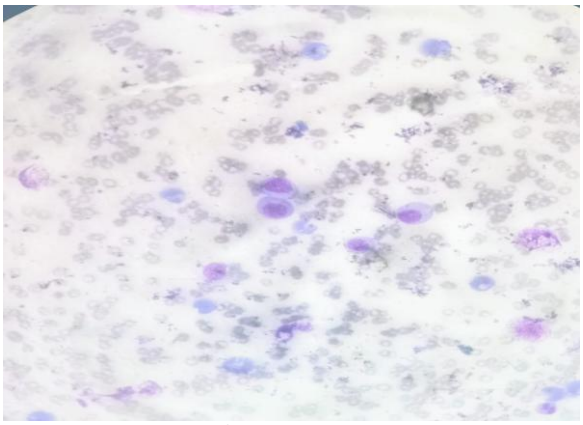

Fig 3: FNAC picture of the lesion showing scattered plasma cells with abormal nuclear cytoplasmic ratio and predominant basophilic cytoplasm.

DISCUSSION

Delecluse *et al*. published the first case series of PBL in 1997, in which they described the primary lesions which appeared in the oral cavity without the involvement of the lymph nodes. The primary lesions can be presented with or without infiltration of the surrounding jaw bone in the various sites in the oral cavity and these sites are gingiva, floor of the mouth, palate and tonsils[5].

Oral NHL can be presented as ulceration, mass lesion, delayed healing of extraction sites or trigeminal neuropathy. It is important to recognize this type of lymphoma confined to gingiva because other gingival enlargements as PBL may mimic benign/reactive gingival enlargements like pyogenic granuloma and peripheral giant cell granuloma[9].

The morphological hallmark of plasmablastic lymphoma is diffuse submucosal proliferation of monomorphic large-sized tumor cells with deep ulceration of the overlying mucosa[10]. The tumor cells typically demonstrate high nuclear-cytoplasmic ratio, moderate amount of amphophilic, or basophilic cytoplasm with squared or rounded borders and centrally or eccentrically placed round nucleus with smooth nuclear outlines[10]. Plasmablasts are a type of lymphoid cells that have retained the morphology of an immunoblast but have

already acquired the immunophenotype of a plasma cell[7]. PBL may show plasma cells which are always reactive in nature and never neoplastic.

The prognosis of PBL is reported to be poor with or without treatment but it has been suggested that addition of highly active antiretroviral therapy and chemotherapy is capable of significantly improving the prognosis[11]. The death is predicted in 1-24 months with average survival time of 6 months[11].

CONCLUSION

In conclusion, this paper has detailed the case of plasmablastic lymphoma presented as hard palate mass. So PBL should be considered in differential diagnosis of hard palate mass. FNAC of mass, histopathological examination and immunohistochemical analysis will aid in accurate diagnosis and treatment. Patient was referred to higher centre for further management.

Declaration of Patient Consent

The authors certify that we have obtained all appropriate patient consent on forms regarding clinical information to be reported in the journal.

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Conflicts of Interest: There are no conflicts of interest

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