

ORAL NON-HODGKIN'S LYMPHOMA IN PATIENT WITH HIV: A CASE REPORT

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Abstract

Non-Hodgkin's Lymphoma belongs to group of lymphoid neoplasm, which may be a presenting symptom in HIV patient who is immuno-compromised. The close association of NHL with HIV infection is formally recognized by the fact that NHL is designated as an Acquired Immuno Deficiency Syndrome defining condition. Oral involvement primarily is not so common in these patients but if involved, they often involve gingiva or palatal region. Here we report a case of Non Hodgkin Lymphoma (NHL) with HIV who presented with primarily involvement of gingiva & palate by NHL.

Keywords : NHL, AIDS, Immuno-compromised

Introduction

The burden of HIV/AIDS in India is large with almost 2.5 million persons infected as estimated by UNAIDS Reports on the Global Epidemic, 2007^[1]. In 1983 the causative agent of this condition was identified as a retrovirus and was subsequently given the delineation of HIV (Human Immuno Deficiency Virus). This virus makes T cells as its primary targets and leads to progressive loss of these cells. This leads to immune-suppression and makes the affected individual susceptible to various unusual infections and neoplasms. Some neoplasms are associated with AIDS like Kaposi's sarcoma and Non Hodgkin Lymphoma (NHL). NHL is very important as it is considered as one of the AIDS defining condition. HIV patients often present first with lymphadenopathy which may turn out to be NHL. On investigation the HIV status of these patients are revealed subsequently. Oral involvement primarily is not so common but if involved, they often involve gingiva or palatal region. Here we report a case of Non Hodgkin Lymphoma (NHL) with HIV who

presented with primarily involvement of gingiva & palate by NHL.

Case Report

A 42 yrs old male presented with growth in right upper alveolus at second molar tooth region since 4 months. CT scan revealed a mass anterolateral to alveolar process of right maxilla as shown in figure 1&2. The lesion was causing bulge along the right maxillo facial region. There was no intra-oral extension or no underlying bony destruction. The mass was excised and histopathological report confirmed the diagnosis of Non Hodgkin's Lymphoma. Patient did not give any contributory medical and family history. On examination his vital parameters were stable. Mild pallor was present. No other Lymphadenopathy. HIV status of patient was positive which was confirmed on Western blot test. Patient was started on anti-retroviral treatment. Also patient was started on combination chemotherapy CHOP regimen. Cyclophosphamide 750 mg/m² IV on day 1, Adriamycin 50mg/m² IV on day 1, Vincristine 1.4mg/m² IV on day 1, Prednisolone 100mg/m² orally day 1 to day 5. The same cycle was repeated every 21 days. Total two cycles were given. There was regression of swelling during chemotherapy but patient was lost for follow-up.

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Figure 1: Coronal view showing mass in maxilla



Figure 2: Axial view showing mass in maxillary region

Discussion

The close association of NHL with HIV infection is formally recognized by the fact that NHL is designated as an Acquired Immune- Deficiency Syndrome (AIDS) defining condition. Risk of lymphoma increases with decreasing CD4 cell count. Recent evidence suggest that the risk of NHL remains elevated more than 30-fold above population rates even in those with mild HIV-induced immune-deficiency^[3]. It rarely manifests as a primary malignancy in the head and neck

region (>1%)^[3] and may give an important clue for undiagnosed HIV infections which accounts for 2% of oral neoplasms in patients with AIDS.

Oral NHL may be the first clinical manifestation of HIV disease^[4]. Oral NHL manifests itself as painless swelling, ulceration, exophytic masses, mobility or early loss of teeth, delayed healing of extraction sites, parasthesia, rapid growth and destruction^[5].

The gingival and palate regions are commonly affected while involvement of alveolus and buccal vestibule are rare. Our patient presented with mass over gingiva which was excised and subsequently he presented with mass anterolateral to alveolar process of right maxilla with lesion causing bulge along the right maxillo facial region. There was no intra-oral extension or no underlying bony destruction. This was uncommon presentation of NHL and seen in HIV patients. Such patients often have secondary involvement of other organs with the primary in the oral cavity^[6] but in our case there was no other involvement except for primary intraoral mass.

Before the advent of AIDS, NHL of the oral cavity was uncommon^[7]. Non oral lymphomas were first reported in patients with AIDS in 1982^[8]. NHL is the second most common HIV related tumour after kaposi's sarcoma, the risk of getting NHL being 60 times greater in patients with HIV disease than in otherwise healthy persons. NHL occurs in 3% of individuals with HIV disease^[9]. The age group affected by NHL related to AIDS is considerably younger than that of unrelated NHL. In our case also the patient was 42 years old only with good general condition.

AIDS related lymphoma often involves extra-nodal tissue. Indeed involvement of the extra-nodal tissue is the rule rather than the exception and is often the site sampled for diagnosis^[10]. Generally a combination chemotherapy (CHOP regimen with cyclophosphamide, doxorubicin, vincristine, prednisolone) and field radiation is recommended for treatment^[11]. Monoclonal antibodies directed against

antigens within the lymphoma and injection of interferon have also been used. The patient in present report was also started on CHOP regimen along with anti-retroviral treatment. After initial cycle his response was good with regression of swelling over maxillary region but unfortunately for unknown reason, patient defaulted treatment.

The prognosis of the disease is usually relapse free as initial response to treatment is good but the disease has a prolonged course interrupted by therapeutic remissions and cure is rare with a maximum of five years survival rate in 30% of cases after therapy^[12].

Conclusion

A person with AIDS is immunocompromised and can present with any of the lesions or conditions and even oral lesion as initial sign of the underlying AIDS. NHL is one of the frequently presenting conditions among AIDS patient and may present as oral lesion in these patients. Hence, such patients should undergo investigations for underlying condition (i.e HIV, if any) by available tests. The treatment in these patients involves treatment of NHL with chemotherapy with continuation of ART.

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