Relapsed Hodgkin's Lymphoma Presenting with Isolated Ulcerative Lesion on Base of Tongue

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Abstract

Introduction Primary extra nodal involvement of Hodgkin's lymphoma is very uncommon and previous reports of Hodgkin's lymphoma involving the base of tongue as isolated lesion in relapsed disease are few.

Case Presentation A 79-years male patient who has diagnosed and treated for stage IV Nodular sclerosis Hodgkin lymphoma 2 years back, now presented with isolated ulcerative lesion in base of tongue which was metabolically active on positron emission tomography scan, suspicious of recurrent disease and was confirmed by routine microscopy and immunohistochemistry of tissue biopsy.

Conclusion Extra nodal relapse at base of tongue was an uncommon clinical scenario in natural history of Hodgkin's lymphoma, which can present as an unexpected challenge for diagnosis and management. So we should be aware of this uncommon but unique presentation of Hodgkin's lymphoma.

Keywords Hodgkin lymphoma · Waldeyer's ring · Extranodal relapse

Introduction

Hodgkins lymphoma (HL) most commonly presents with progressive, painless enlargement of peripheral lymph nodes, especially around cervical region or less frequently mediastinal or abdominal lymph nodes and progresses to

other groups of lymph nodes and eventually to nonlymphoid organs. Lymphomas involve Waldeyer ring much less often [1] and most of these tumors are non-Hodgkin's lymphomas (NHLs).

Hodgkin lymphoma presenting as a lesion of Waldeyer ring are less common and previous studies of patients with HL have reported a low frequency of involvement of Waldeyer ring [2, 3]. Although this is an uncommon clinical scenario, health care professionals should be aware of this possibility [4].

Case Presentation

A 79-years male patient first presented with painless generalized lymphadenopathy. Based upon left cervical lymph node biopsy with typical histopathological and immunohistochemical features, patient was diagnosed and treated for Nodular sclerosis variant of Hodgkin's lymphoma stage IV with bone marrow involvement with 6 cycles of AVD (doxorubicin, vinblastine, and dacarbazine) chemotherapy in 2009. Bleomycin was omitted in view of old age and respiratory comorbidities. The last chemotherapy cycle was completed on April 2010. Post treatment positron emission tomography scan showed no residual metabolic activity.

In October 2012 patient presented to the Oncology Department with a chronic ulcer in the right base of tongue of gradual onset over two months. The ulcer measured 2 × 2 cm in maximum dimensions and was painless. The surrounding margins were indurated and the overlying mucosa was normal. The laboratory examinations were normal.

A positron emission tomography CT scan revealed increased FDG uptake in right base of the tongue and right

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Fig. 1 Serial PET scan with fusion images suggestive of isolated Hodgkin's lymphoma relapse at base of tongue

Fig. 2 HPE (H&E) showing morphologically typical Reed–Sternberg cells and fibrous collagen bands that divide the tissue into nodules in Nodular sclerosis Hodgkin lymphoma (**a**, **b**)

level II lymph nodes which were suspicious of recurrent disease (Fig. 1). Histopathological examination of biopsy disclosed morphologically Reed–Sternberg cells (Fig. 2a,

b) with characteristic CD30-positive with CD 15, CD20, CD45 and CD3-negative cells were identified on immunohistochemistry (Fig. 3a–d). Bone marrow biopsy on

Fig. 3 Typical membranous and Golgi pattern of CD30 positivity (a) with CD 20 (b), CD 45 (c) and CD 3 (d) negativity on immunohistochemical staining in tumor cells of nodular sclerosis Hodgkin lymphoma

staging workup revealed hypo cellular marrow with fibrosis. The stage II A according to the Ann Arbor staging classification of HL was determined.

Currently, the patient had completed 4 cycles of ICE salvage chemotherapy containing ifosfamide, carboplatin, and etoposide. Patient had refused autologous stem cell transplant and further treatment.

Conclusion

Primary extranodal HL is uncommon; it may be localized in the tonsils, skin, central nervous system, lungs, liver and soft tissues etc. [4, 5]. The involvement of extranodal organs occurs either by continuity from adjacent lymph nodes, or during the dissemination in advanced clinical stages. The frequency of HL involving extranodal sites of the head and neck is approximately 4 % [6]. Among this group, HL involving Waldeyer ring, which encompasses the lymphoid tissues of the tonsils, nasopharynx, base of the tongue, and oropharynx wall, is even rarer [4–8].

HL involving Waldeyer ring occurred most often in male patients with local symptoms in stage I or II disease [4, 6–8]. Most reports in the literature suggest that mixed cellularity is the most common type of HL involving Waldeyer ring [6–9]. In the present case report, the patient was already diagnosed as stage IV nodular sclerosis variant with Hodgkin's lymphoma in the year 2009 and now relapsed with isolated extranodal involvement i.e., right base of tongue and the diagnosis was made with biopsy and immunohistochemistry of right base of tongue which showed HL involvement.

Finally, we present an unusual extranodal site of relapsed HL in the base of the tongue. Base of tongue is a rare site of extra nodal relapse of Hodgkin's lymphoma which can be clinical challenge in diagnosis and management. So health care professionals should be aware of this uncommon but unique presentation of Hodgkin's lymphoma.

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Conflict of interest The author declares that they have no competing interests.

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