

Non-Hodgkin Lymphoma Presenting as Unilateral Tonsillar Hypertrophy: Case Report

Parvaneh Dehghan¹, Samaneh Kakhki²

¹ Department of Oncology, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran

² Department of Pharmacology, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran

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Abstract- Oropharyngeal lymphomas are uncommon but most frequently arise in the Waldeyer's ring, which is the second most common site for extranodal lymphomas after the gastrointestinal tract. Non-Hodgkin's lymphoma of the Waldeyer's ring is a relatively rare entity, and the palatine tonsil is the most frequently involved site. A 72-year-old woman presented with a sore throat who had not responded to routine treatment. On physical examination, a smooth non-tender mass was observed in the left palatine tonsil. Routine laboratory tests were normal. Computed tomography (CT) scan revealed tonsillar hypertrophy and CT images in other areas were also normal. Tonsillectomy was done with a tentative diagnosis of lymphoma. Histological examination confirmed a diagnosis of non-Hodgkin's lymphoma diffuse large cell type of B phenotype. A combined treatment consisting of chemotherapy and radiotherapy leads to a satisfactory outcome in patients with this uncommon neoplasm, which tends to present at an early stage and to have a favorable prognosis.

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Keywords: Non-Hodgkin's lymphoma; Tonsil treatment; Prognosis

Introduction

Lymphoma is the second most common neoplasm of the head and neck after squamous carcinoma (1,2). They are generally classified as Hodgkin's (HL) or non-Hodgkin malignant lymphomas (NHML). Non-Hodgkin's lymphoma of the Waldeyer's ring is a relatively rare entity, and the palatine tonsil is the most frequently involved site (3,4). Most lymphomas in palatine tonsils are the B-cell type, and diffuse large B cell lymphoma (DLBCL) represents around 67-96% (5,6). We report a case of localized extranodal non-Hodgkin's lymphoma of the tonsil.

Case Report

A 72-year-old female patient with a persistent sore throat and enlarged tonsils were referred to us who had not responded to earlier treatment.

On physical examination, a smooth non-tender mass was observed in the left palatine tonsil without any constitutional symptoms. Computer tomography (CT) scan in neck revealed hypertrophy in the left-sided fossa

tonsillar, but no signs of neck lymphadenopathy and CT imaging in other areas were also normal (Figure 1). Family history did not appear to be contributory regarding the etiology, and in accordance with the clinical parameters, she was in stage 1A.

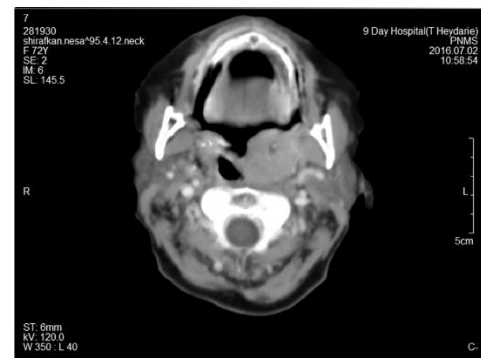


Figure 1. Neck CT imaging in the axial section was revealed a left-sided tonsillar hypertrophy

According to the patient's symptoms and the tonsillar hypertrophy, tonsillectomy was performed with a tentative diagnosis of lymphoma.

Histological examination revealed a diagnosis of

Corresponding Author: S. Kakhki

Department of Pharmacology, Torbat Heydariyeh University of Medical Sciences, Torbat Heydariyeh, Iran
Tel: +98 915 5186014, Fax: +98 515 2226022, E-mail address: samane_ph@yahoo.com

Case presentation of unilateral tonsillar hypertrophy

non-Hodgkin's lymphoma diffuse large cell type of B phenotype (non GCB like). Immunohistochemically, the neoplastic cells were positive for CD20 and negative for CD30, CD3, CD4, CD5, CD8 and CD10 (Figure 2). The patient was treated with chemotherapy based on R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine, and prednisolone) protocol with radiotherapy. She remains disease-free During 18 months of follow-up.

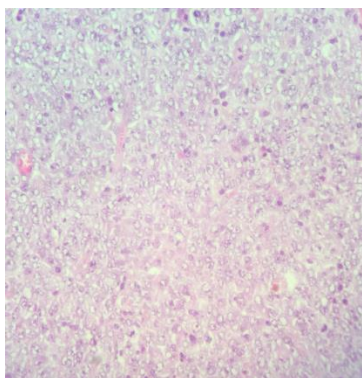


Figure 2. Diffuse growth pattern of large cells with amphophilic or pale cytoplasm and eccentric vesiculo-nucleoli nuclei

Discussion

Non-Hodgkin's represents a small percentage of oral malignancies, and the Waldeyer's ring (including tonsil, nasopharynx, and base of tongue) is the most common extranodal site (7,8). Peak incidence is in the 6-7 decades of life in published series with a male predominance. Diffuse large B-cell is the most common histologic type and is an aggressive variety and less commonly by T-cell lines (9).

Clinical signs and symptoms are not specific and occur as a result of asymmetrical tonsillar enlargement. They may include a sensation of fullness in the throat, sore throat, dysphagia, odynophagia, otalgia, cervical adenopathy, tonsillar swelling or snoring. Systemic symptoms, such as fever, weight loss, and night sweats are uncommon and may develop in advanced disease (10).

Early stage disease and small lesions had 5-year survival rates of 65-85% when compared to bulky lesions (lesions more than 7 cms) especially the tonsils (11).

Localized non-Hodgkin's lymphomas (NHLs) of the head and neck are treated with chemotherapy or/and combination radiotherapy. Combined chemo radiation is frequently used as the primary treatment in the view of local relapses due to bulky disease and aggressive

histology and for complete remission and better survival rates (12).

Non-Hodgkin's lymphoma of the Waldeyer's ring is a relatively rare entity, and the diffuse large cell type of B phenotype is the vast majority of them. Early stage disease and combined therapy consisting of chemotherapy and radiotherapy lead to a satisfactory outcome in patient with this uncommon neoplasm.

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References

1. Endo S, Kida A, Sawada U, Sugitani M, Furusaka T, Yamada Y, et al. Clinical analysis of malignant lymphomas of tonsils. *Acta Otolaryngol Suppl* 1995;523:263-6.
2. Epstein JB, Epstein JD, Le ND, Gorsky M. Characteristics of oral and paraoral malignant lymphoma: a population-based review of 361 cases. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 2001;92:519-25.
3. Fuller LM, Krasin MJ, Velasquez WS, Allen PK, McLaughlin P, Rodriguez MA, et al. Significance of tumor size and radiation dose to local control in stage I–III diffuse large cell lymphoma treated with CHOP-Bleo and radiation. *Int J Radiat Oncol Biol Phys* 1995;31:3-11.
4. Harnsberger HR, Bragg DG, Osborn AG, Smoker W, Dillon WP, Davis R, et al. Non-Hodgkin's lymphoma of the head and neck: CT evaluation of nodal and extranodal sites. *AJR Am J Roentgenol* 1987;149:785-91.
5. Hart S, Horsman J, Radstone C, Hancock H, Goepel J, Hancock B. Localised extranodal lymphoma of the head and neck: the Sheffield Lymphoma Group experience (1971–2000). *Clin Oncol* 2004;16:186-92.
6. Jacobs C, Weiss L, Hoppe RT. The management of extranodal head and neck lymphomas. *Arch Otolaryngol Head Neck Surg* 1986;112:654-8.
7. Laskar S, Bahl G, Muckaden MA, Nair R, Gupta S, Bakshi A, et al. Primary diffuse large B-cell lymphoma of the tonsil. *Cancer* 2007;110:816-23.
8. Miller TP, Jones SE. Initial chemotherapy for clinically localized lymphomas of unfavorable histology. *Blood* 1983;62:413-8.
9. Mohammadianpanah M, Daneshbod Y, Ramzi M, Hamidzadeh N, Dehghani SJ, Bidouei F, et al. Primary tonsillar lymphomas according to the new World Health Organization classification: to report 87 cases and

literature review and analysis. *Ann Hematol* 2010;89:993-1001.

10. Osuch-Wojcikiewicz E, Rzepakowska A, Bruzgielewicz A, Wieczorek J. Follicular (nodular) non-Hodgkin's lymphoma of tonsil--case report *Otolaryngol Pol* 2006;61:203-6.
11. Vasilakaki T, Tsavari A, Arkoumani E, Koulia K, Manoloudaki K, Marinis A, et al. Primary mantle cell lymphoma of the tonsil: An uncommon case. *Hell Cheirourgike* 2015;87:485-7.
12. Yamanaka N, Harabuchi Y, Sambe S, Shido F, Matsuda F, Kataura A, et al. Non-Hodgkin's lymphoma of Waldeyer's ring and nasal cavity. Clinical and immunologic aspects. *Cancer* 1985;56:768-76.