

Diffuse B-cell Non-Hodgkin's Lymphoma presenting as Unilateral Tonsillar Enlargement in an Adult: A Rare Case Report

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Abstract

Introduction:

Unilateral tonsillar enlargement in adults is commonly attributed to benign inflammatory or anatomical causes. However, it may rarely represent an underlying malignancy such as lymphoma. Early recognition is crucial, as delayed diagnosis adversely affects prognosis.

Case Report:

We report a case of a 24-year-old male presenting with unilateral right tonsillar enlargement and odynophagia of one month's duration. Contrast-enhanced computed tomography of the neck revealed a neoplastic-appearing mass in the right tonsillar fossa. Bilateral coblation-assisted tonsillectomy was performed. Histopathological examination and immunohistochemistry confirmed diffuse large B-cell non-Hodgkin's lymphoma of the right tonsil, while the left tonsil showed features of chronic tonsillitis.

Conclusion:

Although rare, lymphoma should be considered in adults presenting with unilateral tonsillar hypertrophy, even in the absence of constitutional symptoms. Tonsillectomy remains a key diagnostic tool, enabling early diagnosis and timely oncological management.

Keywords: Diffuse large B-cell lymphoma; Non-Hodgkin's lymphoma; Unilateral tonsillar enlargement; Tonsillar malignancy; Case report

Introduction

Tonsillar asymmetry is frequently encountered in otolaryngology practice and is most often benign, resulting from chronic inflammation, lymphoid hyperplasia, or anatomical variation [1]. The incidence of malignancy in tonsillectomy specimens is low, estimated at approximately 2.5 cases per 10,000 procedures [1]. Nevertheless, unilateral tonsillar enlargement—particularly when progressive or

associated with symptoms—should prompt careful evaluation.

Non-Hodgkin's lymphoma (NHL) represents the most common extranodal malignancy of the head and neck region, with Waldeyer's ring involved in nearly 15% of cases [2]. The palatine tonsil is a recognized primary site, and diffuse large B-cell lymphoma (DLBCL) is the most frequently encountered

histological subtype in this region [2,3]. Clinical presentation may be subtle, and systemic “B symptoms” may be absent, leading to diagnostic delay

Clinical Case

A 24-year-old male presented to the Department of Otorhinolaryngology with a change in voice for 20 days and recurrent sore throat for several months. He had a history of gutka consumption for approximately three years. There was no history of fever, weight loss, or night sweats.

General physical examination was unremarkable. Oropharyngeal examination revealed unilateral Grade IV enlargement of the right tonsil with obliteration of the peritonsillar space (figure 1). The left tonsil appeared clinically normal. Examination of the nose and ears was unremarkable, and no significant cervical lymphadenopathy was detected.

Routine hematological investigations were within normal limits. Magnetic resonance imaging was initially planned; however, due to logistical constraints, a contrast-enhanced computed tomography scan of the neck was performed. Imaging demonstrated a well-defined polypoidal soft-tissue lesion measuring approximately $2.0 \times 3.0 \times 3.5$ cm arising from the right tonsillar fossa and extending to the lateral wall of the oropharynx, suggestive of a neoplastic etiology.

The patient underwent bilateral coblation-assisted tonsillectomy. Histopathological examination of the right tonsil (figure 2) revealed features consistent with high-grade diffuse large B-cell non-Hodgkin's lymphoma. The left tonsil showed features of chronic tonsillitis. Immunohistochemistry demonstrated positivity for CD20, Bcl-2, Bcl-6, MUM1, Cyclin D1, and a high proliferative index with Ki-67 of approximately 76%, confirming the diagnosis.

Discussion

Primary lymphoma of the palatine tonsil is an uncommon entity in adults and may closely mimic benign tonsillar pathology, often resulting in delayed diagnosis [4,6]. Diffuse large B-cell lymphoma constitutes the most common histological subtype involving Waldeyer's ring [2,5].

Unilateral tonsillar hypertrophy remains the most important clinical indicator of possible malignancy, particularly when associated with symptoms such as

odynophagia, dysphagia, voice change, or otalgia [4]. Systemic “B symptoms” and cervical lymphadenopathy may be absent in localized disease, as observed in the present case [4,5].

Imaging plays an important adjunctive role in assessing lesion extent and regional involvement. Although magnetic resonance imaging provides superior soft-tissue delineation, contrast-enhanced computed tomography is a valuable alternative. However, radiological findings are nonspecific and cannot reliably differentiate lymphoma from other tonsillar neoplasms [2,6].

Tonsillectomy remains the cornerstone for definitive diagnosis, allowing comprehensive histopathological and immunohistochemical evaluation [1,4]. Bilateral tonsillectomy is recommended even when the contralateral tonsil appears clinically normal, as occult pathology may be present. Early diagnosis enables prompt referral for oncological management, which is associated with favorable outcomes, particularly in localized extranodal lymphoma [5,6].

This case emphasizes the need for heightened clinical suspicion of lymphoma in adults presenting with unilateral tonsillar enlargement, even in the absence of systemic symptoms.

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Figure 1-



Figure 2-

Right Tonsil



Left Tonsil

