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# Nasopharyngeal lymphoma revealed by isolated odynophagia: a rare and misleading presentation

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## ABSTRACT

Non-Hodgkin lymphoma of the nasopharynx is a rare entity among malignancies of the cavum, in contrast to undifferentiated carcinoma of nasopharyngeal type, which is far more frequent. It represents approximately 20–25% of lymphomas involving Waldeyer's ring. We report the case of a 39-year-old man presenting with odynophagia and hypersalivation evolving over three months, associated with bilateral nasal obstruction, snoring, and significant weight loss. Clinical examination revealed multiple cervical lymphadenopathies and a downward displacement of the soft palate. Nasal endoscopy showed complete obstruction of the nasopharynx and choanae by a non-bleeding tumoral mass. Imaging demonstrated extensive locoregional disease with multiple cervical, mediastinal, and axillary lymphadenopathies, associated with bone involvement. Histopathological and immunohistochemical analysis of a biopsy specimen confirmed a diffuse large B-cell non-Hodgkin lymphoma. The disease was classified as stage IV according to the Lugano classification. The patient was treated with immunochemotherapy combined with radiotherapy. This case highlights odynophagia as an atypical revealing symptom of nasopharyngeal non-Hodgkin lymphoma and emphasizes the importance of histological diagnosis and appropriate staging for optimal management.

## KEYWORDS :

Lymphoma, Non-Hodgkin; Diffuse large B-cell lymphoma; Nasopharynx; Nasopharyngeal neoplasms; Odynophagia; Waldeyer's ring; Immunochemotherapy.

## **MAIN ARTICLE**

### **INTRODUCTION**

Lymphomas of the upper aerodigestive tract represent a heterogeneous group of malignant lymphoid proliferations, most commonly arising from Waldeyer's ring. The nasopharynx is an uncommon site, accounting for less than 5% of extranodal head and neck lymphomas, and its involvement is often overshadowed by more frequent epithelial malignancies such as nasopharyngeal carcinoma [1,2].

Nasopharyngeal lymphomas are predominantly non-Hodgkin lymphomas, most frequently diffuse large B-cell lymphoma (DLBCL). Clinical presentation is often nonspecific and may include nasal obstruction, epistaxis, cervical lymphadenopathy, or otologic symptoms. Isolated odynophagia as the sole revealing symptom is exceptional and may delay diagnosis [3,4].

Because of their submucosal growth pattern and relative rarity, nasopharyngeal lymphomas pose diagnostic challenges for otorhinolaryngologists. Imaging and histopathological examination, supported by immunohistochemistry, are essential for accurate diagnosis and staging [5]. We report a rare case of nasopharyngeal lymphoma revealed solely by odynophagia, highlighting diagnostic pitfalls and management principles.

### **PATIENT AND OBSERVATION**

A 39-year-old man with a history of epilepsy under medical treatment presented with odynophagia and hypersalivation evolving over three months. Symptoms were associated with bilateral nasal obstruction, snoring, and unintentional weight loss estimated at 9 kg. Clinical examination revealed multiple left lateral cervical, supraclavicular, and spinal lymphadenopathies. Oral examination using a tongue depressor showed a downward displacement of the soft palate, more pronounced on the left side. Nasal endoscopy revealed complete obstruction of the nasopharynx and choanae by a rosé, non-bleeding tumoral mass, with stagnation of nasal secretions. (Figure1)

Cervical and thoraco-abdomino-pelvic computed tomography demonstrated multiple laterocervical, mediastinal, and axillary lymphadenopathies associated with a bone lesion located in the costovertebral gutter at the level of the D7 vertebra (Figure 3). Magnetic resonance imaging of the nasopharynx revealed a tumoral process occupying all walls of the

rhinopharynx, appearing isointense on T1-weighted sequences and hyperintense on T2-weighted sequences, with extension to the parapharyngeal fat and inferior extension to the posterior and left lateral walls of the oropharynx. The lesion infiltrated the tonsillar region and soft palate anteriorly and extended inferiorly to the upper border of the epiglottis (Figure 2).

A nasopharyngeal biopsy was performed. Histopathological and immunohistochemical analysis confirmed a diffuse large B-cell non-Hodgkin lymphoma of non-germinal center type. According to the Lugano classification, the disease was staged as stage IV. The patient was treated with immunochemotherapy using the R-CHOP protocol combined with radiotherapy.

## **DISCUSSION**

Extranodal lymphomas of the head and neck region account for approximately 20–30% of all non-Hodgkin lymphomas, with Waldeyer's ring being the most frequent site of involvement [6]. However, isolated nasopharyngeal localization remains rare and may mimic benign inflammatory conditions or epithelial malignancies, contributing to diagnostic delay [2,7].

Unlike nasopharyngeal carcinoma, which often presents with nasal obstruction, epistaxis, or cervical lymphadenopathy, nasopharyngeal lymphoma may manifest with atypical or minimal symptoms. Odynophagia as the sole presenting complaint, as observed in our patient, is particularly uncommon and sparsely reported in the literature [4,8]. This highlights the importance of thorough endoscopic evaluation and a high index of suspicion when symptoms persist despite unremarkable initial findings.

Radiologically, nasopharyngeal lymphomas typically appear as submucosal soft-tissue masses with homogeneous or moderately heterogeneous enhancement. Magnetic resonance imaging is superior to computed tomography in assessing local extension and parapharyngeal involvement, while FDG-PET/CT plays a crucial role in staging and response assessment according to the Lugano classification [9,11].

Definitive diagnosis relies on histopathological examination with immunohistochemical profiling, allowing distinction between B-cell and T-cell lymphomas and exclusion of undifferentiated carcinoma or other lymphoid lesions [5,10]. Diffuse large B-cell lymphoma remains the most common histological subtype in nasopharyngeal involvement [12].

Therapeutic management is primarily based on systemic chemotherapy, most commonly R-CHOP-based regimens, with or without adjuvant radiotherapy depending on stage, response, and risk factors [12,13]. Current ESMO guidelines emphasize a combined modality approach

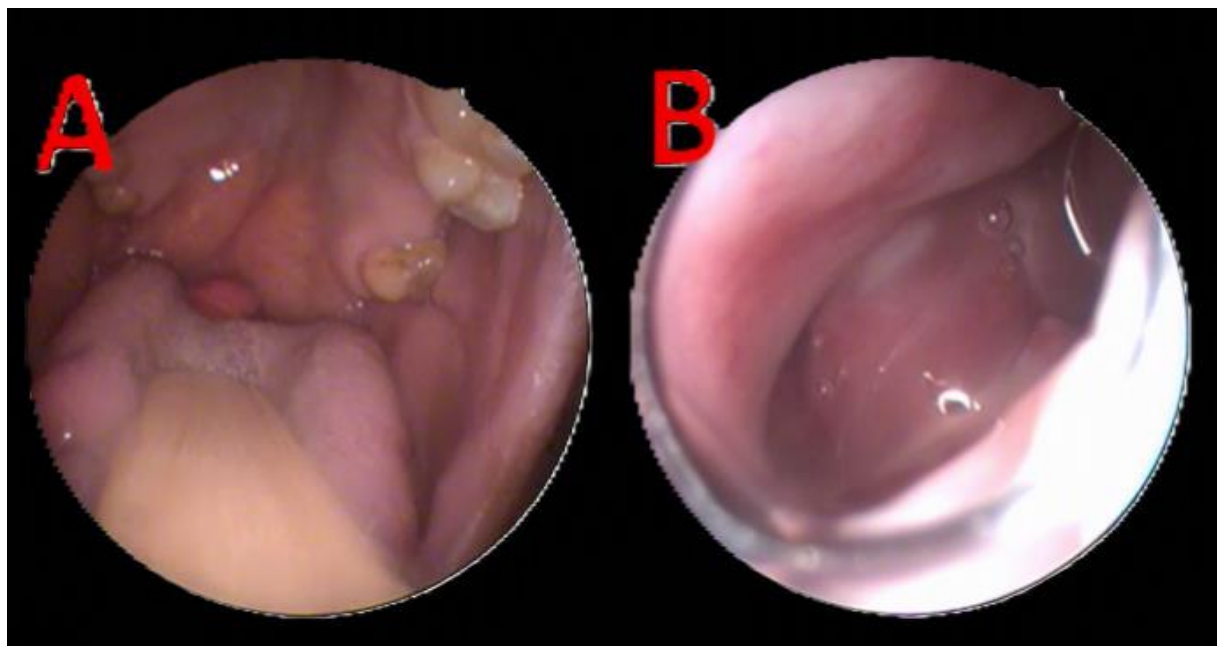
in localized disease, which achieves high rates of disease control and favorable survival outcomes [13,14].

Prognosis depends on histological subtype, stage at diagnosis, patient age, and treatment response. When diagnosed early and appropriately managed, nasopharyngeal lymphomas generally have a better prognosis than epithelial malignancies of the nasopharynx [8,14].

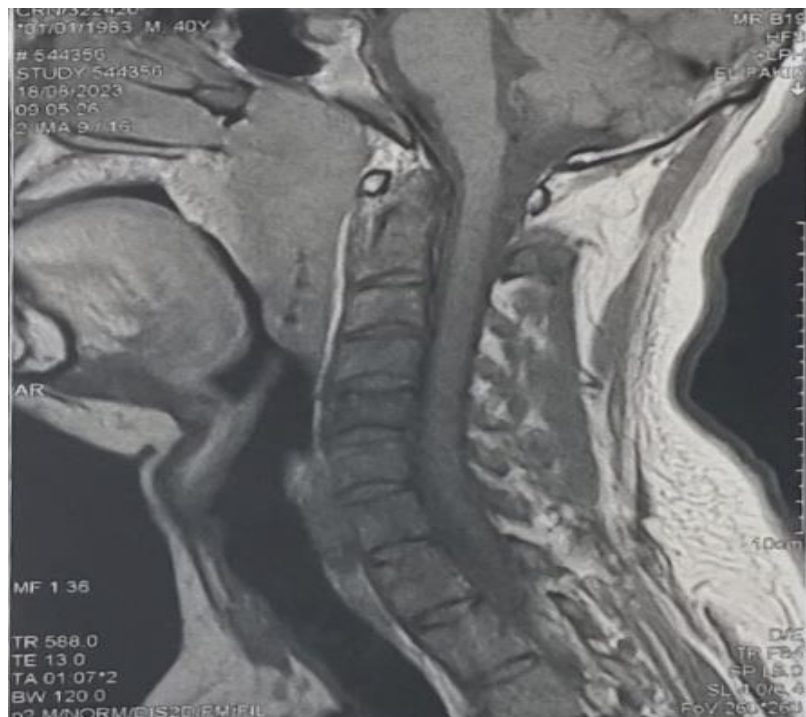
### **CONCLUSION**

Non-Hodgkin lymphoma of the nasopharynx is a rare entity among lymphomas and nasopharyngeal malignancies. Its clinical presentation varies according to disease extent and may include atypical symptoms such as odynophagia. Diagnosis relies primarily on histopathological and immunohistochemical examination, while imaging plays a crucial role in staging. Treatment depends on disease stage and prognostic factors. Early recognition and appropriate management are essential to improve outcomes.

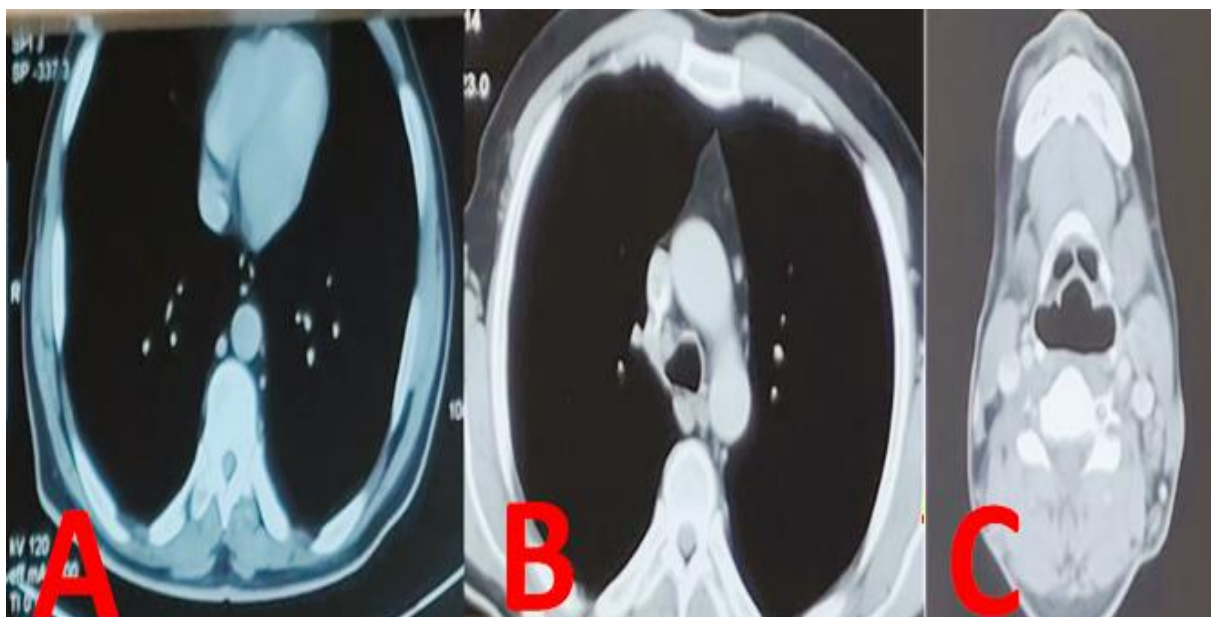
### **FIGURES :**



**Figure 1:**Endoscopic images showing downward displacement of the soft palate (A) and tumoral obliteration of the nasopharynx (B).



**Figure 2:** Sagittal T1-weighted MRI showing a nasopharyngeal lesion extending into the oropharynx



**Figure 3:** Axial contrast-enhanced CT (C-TAP) showing cervical (C) and mediastinal (B) lymphadenopathies and a bone metastasis (A).

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### **Conflicts of Interest**

The authors declare no conflicts of interest.

### **Patient Consent**

Written informed consent was obtained from the patient for the publication of this case and the accompanying clinical and radiological images.

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