

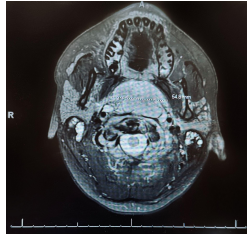
## Introduction

Nasopharyngeal carcinoma (NPC) is a rare malignancy that typically presents with vague symptoms such as nasal congestion, rhinorrhea, or cervical lymphadenopathy—often mimicking benign conditions like viral illness or allergies. Despite its rarity in the U.S., NPC has a strong association with Epstein-Barr Virus (EBV) and is endemic in certain populations. Early recognition is crucial, as delays in diagnosis can lead to advanced disease requiring aggressive multimodal therapy. This case illustrates how a delayed diagnosis in a young adult with nonspecific symptoms led to stage IV NPC.

## Case Presentation

A 23-year-old male with ADHD, Wolff-Parkinson-White syndrome and silica exposure presented with months of throat swelling, nasal congestion, and a persistent neck mass. Initially diagnosed with allergic rhinitis and dermatofibroma, he received symptomatic treatment including pseudoephedrine and intranasal corticosteroids. Repeated visits led to additional diagnoses of oral candidiasis and pharyngitis. Imaging was finally obtained after the patient presented with bloody sputum. A CT on August 23, 2024, revealed a large nasopharyngeal mass with bilateral lymphadenopathy and clival involvement. Biopsy confirmed EBV-associated nonkeratinizing squamous cell carcinoma, stage IV. Treatment included induction chemotherapy with gemcitabine and cisplatin, followed by proton beam radiation and concurrent cisplatin. Cisplatin was discontinued early due to toxicity. By May 2025, imaging and endoscopy showed complete resolution of the primary mass and marked lymph node response.

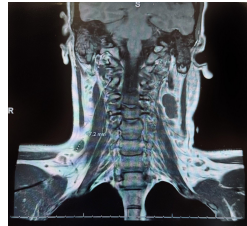
## Case Presentation



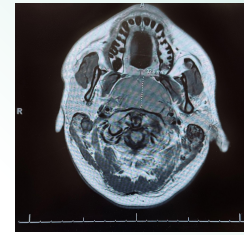
MRI Neck With Contrast



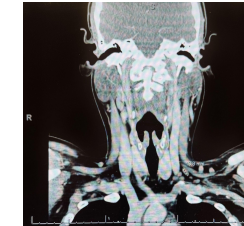
CT Neck Soft Tissue Without Contrast



MRI Neck With Contrast



MRI Neck With Contrast



CT Neck Soft Tissue Without Contrast

## Discussion

NPC is often overlooked in non-endemic populations due to its rare occurrence and nonspecific symptoms. This case highlights the diagnostic challenge in differentiating early NPC from benign upper respiratory conditions. EBV-associated, nonkeratinizing squamous cell carcinoma is the most common histologic subtype and often presents at an advanced stage. Imaging—especially MRI and PET-CT—plays a key role in diagnosis and staging. The mainstay of treatment is chemoradiation, with proton beam therapy offering reduced toxicity to surrounding structures. Early suspicion and prompt imaging are essential, as delays can significantly affect prognosis. In this patient, a multidisciplinary approach led to disease remission despite initial misdiagnosis and treatment toxicity.

## Conclusion

Clinicians should maintain a high index of suspicion for NPC in patients with persistent nasopharyngeal or cervical symptoms unresponsive to standard treatment. Early imaging and biopsy are critical for diagnosis. This case reinforces the importance of timely evaluation, interdisciplinary collaboration, and awareness of NPC's varied presentation—even in young, otherwise healthy individuals.

## References

Su ZY, Siak PY, Lwin YY, Cheah SC. Epidemiology of nasopharyngeal carcinoma: current insights and future outlook. *Cancer Metastasis Rev.* 2024;43(3):919-939. doi:10.1007/s10555-024-10176-9