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# The Silent Invader: A Rare Presentation of a Well Known Cause

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**Abstract:** We report a case of 47 year old male who presented to us with right sided headache, swelling on both side of neck, double vision, drooping of right eyelid over a period of 4 months which turned out to be nasopharyngeal carcinoma (NPC) with multiple cranial nerve palsies. It is a rare condition and high index of suspicion is needed for the diagnosis. Cranial nerves III, IV, V, VI, IX and XII were the most commonly involved nerves<sup>[1]</sup>Even though it has a very good response to radiotherapy and chemotherapy, a delay in diagnosis may adversely affect the prognosis due to its aggressive nature.

Keywords: Nasopharyngeal carcinoma, cranial nerve palsy, Intracranial extension, radiotherapy

#### 1. Introduction

#### **Case Report**

A 47 year old male referred from a local hospital presented with right sided headache and facial pain, swelling on both side of neck for 4 months, double vision and drooping of right eyelid for 4 days .The symptoms were gradually progressive.



Figure 1(a): Right level II and level V lymph node enlargement



Figure 1(b): Left level II lymph node enlargement

On general examination, there was complete ptosis of right eye. vitals were stable.On local examination, multiple cervical lymphadenopathy was present(right level II,V and left level II) [Fig 1 (a) and (b)]

Anterior rhinoscopy was normal.On posterior rhinoscopy, there was a red colored lobulated mass on the roof and posterior wall of nasopharynx extending laterally on either side.

On further examination, the extraocular movements of right eye were absent. Also there was diminished sensation over upper two third of right half of face, decreased movement of left side of soft palate and deviation of uvula to right, deviation of tip of tongue towards right. On otoscopic examination, there was grade II retraction of tympanic membrane on right side, grade I retraction on left. Tuning fork tests showed moderate conductive hearing loss on right side.

Endoscopic examination of nose was done and it revealed red colored lobulated mass in the nasopharynx involving lateral walls on either side [Fig.2]



Figure 2: Endoscopic view of the nasopharynx through left nasal cavity

Contrast enhanced MRI scan of was taken and it showed lytic destructive lesion involving posterior and lateral nasopharyngeal wall on both side. Hypointense on T1W and heterogenously hyperintense on T2w images. The lesion is extending to both sphenoid sinuses, right cavernous sinus with complete enhancement of the cavernous segment of

Volume 12 Issue 12, December 2023 www.ijsr.net Licensed Under Creative Commons Attribution CC BY right ICA, reaches upto right superior orbital fissure [**Fig. 3**]. III, V. Multiple enlarged lymphnodes are noted in bilateral level II,

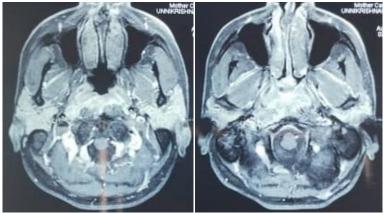


Figure 3: Heterogenously hyperintense lesion involving posterior and lateral nasopharyngeal wall in T2W MRI brain

FNAC of cervical lymph node was suggestive of metastasis from poorly differentiated squamous cell carcinoma.

Considering these clinical and radiological findings, diagnosis of nasopharyngeal carcinoma(NPC) T4aN2M0 stage IVa with involvement of III,IV,V1,V2,VI,XII was made. Decreased movement of palatal arch on left side may be due to infiltration by the mass rather than neural involvement.For confirmation of the diagnosis,the patient underwent nasopharyngoscopy and biopsy under local anaesthesia and specimen was sent for histopathological examination.The histopathology report came as nasopharyngeal carcinoma-undifferentiated type

Patient was then referred to radiation oncology for further management. CECT abdomen was taken which showed metastasis in liver. He took 2 cycles of induction chemotherapy and planning to continue 1 more cycle of chemotherapy followed by concurrent chemoradiation. He is tolerating well.

## 2. Discussion

This is a case of a T4aN2 M0 staged undifferentiated NPC with significant expansion into the neighboring structures of the nasopharynx and cervical lymph nodes.Genetic factors, environmental exposures, and Epstein-Barr virus (EBV) infection are all potential causes for NPC [4]. According to the World Health Organization(WHO), nasopharyngeal carcinoma is classified into three subtypes namely, keratinizing squamous cell carcinoma, nonkeratinizing squamous cell carcinoma and undifferentiated or poorly differentiated carcinoma including lymphoepithelioma and anaplastic variant<sup>[6]</sup>.Generally, surgical resection does not play a large role in the initial treatment for NPC regardless of the staging, with chemoradiotherapy serving as the gold standard . This is because the anatomical region is a difficult target to navigate for full tumor resection with clear margins. Additionally, these neoplasms are historically responsive to a combination of radiation with or without chemotherapy, depending on the staging of the disease.

Chemotherapy will be added to the regimen when a tumor is classified as at least stage II . The role that surgery plays in

these cases is reserved for when the neoplasm reoccurs the following chemoradiotherapy, leading to the potential use of salvage surgery with neck node dissection for curative intention. Not all patients are candidates for these procedures, as there are high morbidity and complication rate.

## 3. Conclusion

For the correct diagnosis of nasopharyngeal carcinoma a high degree of suspicion and a proper assessment is essential.<sup>[3]</sup> Most common presentation of nasopharyngeal carcinoma is enlarging neck nodes (70%) and involvement of cranial nerves constitute only 20% of total cases<sup>[2]</sup>.With CN involvement being associated as a poor prognostic indicator for NPC disease progression, it is concluded that thorough and frequent neurological examinations are warranted throughout the treatment course with NPC patients.

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