



A RARE SCENARIO OF NASOPHARYNGEAL CARCINOMA WHICH MIMICS TUBERCULOSIS.

M. Shruthika	Sree Balaji Medical College Second Year Under Graduate MBBS.
S. Shreya*	Sree Balaji Medical College Second Year Under Graduate MBBS. *Corresponding Author
Dr.M.K Rajasekar	Sree Balaji Medical College Professor And Head of ENT Department And Former Director of ENT In MMC

ABSTRACT Nasopharyngeal carcinoma is a tumor of the epithelium of nasopharynx. Almost one third of nasopharyngeal carcinomas of undifferentiated type are usually diagnosed in young adults with one third rarely affecting childhood^[1]. We present a 21 year old female with swelling on neck associated with pain and was earlier suspected to have tuberculosis and received anti-tuberculosis treatment. She was presumed to have tuberculosis but was later diagnosed to have Nasopharyngeal carcinoma of non-keratinised type with symptoms mimicking nasopharyngeal tuberculosis. Clinical symptoms revealed features of tuberculosis but diagnostic nasal endoscopy shows proliferative growth and histopathology displayed characteristic features of Non- keratinised nasopharyngeal carcinoma. Nasopharyngeal carcinoma should thus be suspected in patients with cervical lymphadenitis who present with tuberculosis symptoms and must be diagnosed and treated early to prevent metastasis.

KEYWORDS : Nasopharyngeal carcinoma, non- keratinised , tuberculosis,

INTRODUCTION

Nasopharyngeal carcinoma also known as lymphoepithelioma is a malignancy arising from the epithelial cells of the nasopharynx. It is one of the commonest epithelial cancer in the adult age group. On histopathological grounds nasopharyngeal carcinoma falls into three sub groups as per WHO classification⁽²⁾ - keratinising type (20-25%), Non keratinising differentiated type (10-15%), Non keratinising undifferentiated type (60-65%). Epstein Barr virus infection, coupled with genetic susceptibility, has shown considerable relevance to the disease.⁽³⁾

We present a 21 year old female with cervical lymphadenitis, loss of appetite and weight who was earlier suspected to have tuberculosis and now diagnosed to have Nasopharyngeal carcinoma. This misinterpretation was due to the symptoms which the patient presented with, mimics tuberculosis. We believe just the mere presence of clinical symptoms of any particular disease does not always lead to its diagnosis. High end investigation must be done before coming to a conclusion and starting a treatment regimen.

CASE STUDY

A 21 year old female presented with history of swelling which is progressive in nature over the left lateral aspect of the neck associated with intermittent pain for 6 months and loss of appetite and weight for past three months. The patient had a negative history for diabetes mellitus, thyroid disease, epilepsy and no recent episodes of cough and breathlessness was reported.

The patient, a year earlier was suspected to have nasopharyngeal tuberculosis on the grounds of evening rise of temperature, cervical lymphadenopathy, episodes of fever and cough, weight loss, tinnitus and also residing in one of tuberculosis endemic country (INDIA). Mantoux test was negative but may have been presumed as false negative on the grounds of very old TB infection or overwhelming TB disease⁽⁴⁾. Hence she was under anti tuberculosis treatment regimen for eight months as recommended. But patient had no improvement, hence visited our hospital.

Recent biopsy of cervical lymphadenitis reveals no evidence of granuloma. On examination swelling of size 4*3 cm firm in consistency with tenderness, no warmth, no discharging sinus and a excision biopsy scar in left lateral aspect of neck was noted. Diagnostic nasal endoscopy procedure shows proliferative growth occupying 75% of choana which bleeds on touch with well defined borders. Volumetric laser endomicroscopy imaging reveals tonsil being pushed medially with free pyriform fossa and mobile vocal cords. Helical studies of neck after administration of IV contrast (CECT neck) shows ill defined mass anteriorly extending upto choana and anterolaterally, the mass erodes the medial pterygoid muscle. Posteriorly the mass

involves retro pharyngeal spaces and paravertebral muscles with erosion of left occipital condyle. Posterolaterally the mass extends into the left parapharyngeal space, carotid space encasing and narrowing it. Superiorly the mass extends in to the base of the skull on the left side and eroding the floor of middle cranial fossa. Inferiorly it extends along the left lateral wall of oropharynx upto C1-vertebra. Histopathology reveals Nonkeratinised nasopharyngeal carcinoma. [figure 1,2,3]

After the diagnostic confirmation the patient was referred to oncologist and was started on chemotherapy.

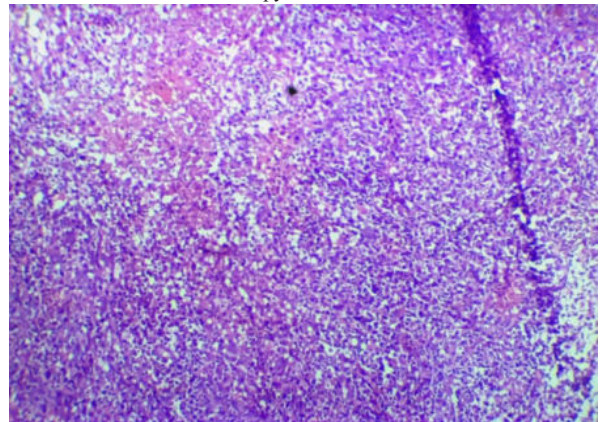


Figure 1: Low Power microscopic image of nasopharyngeal carcinoma

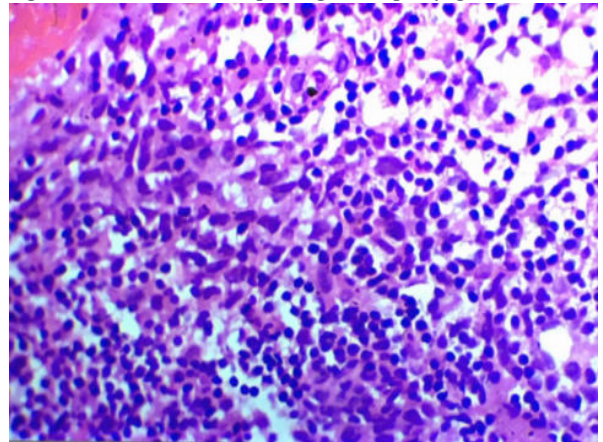


Figure 2: High Power microscopic image of nasopharyngeal carcinoma

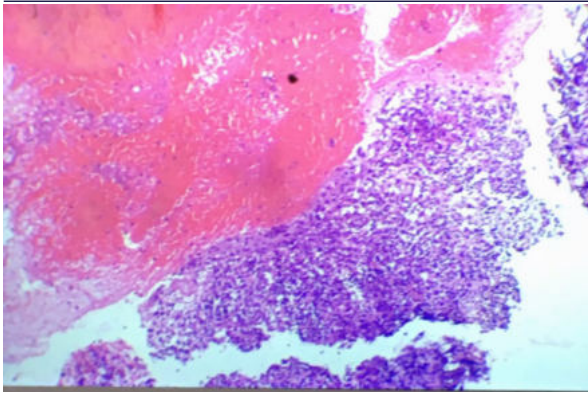


Figure 3: Microscopic image showing Tumor with Hemorrhage

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DISCUSSION

Nasopharyngeal carcinoma is known to originate from the lateral wall of the nasopharynx (including fossa of rosenmuller) . It then extends within or out of the nasopharynx and metastasis to cervical lymph nodes. Postero-superiorly it may extend till the base of the skull or the palate.(5).

Nasopharyngeal carcinoma shows a bimodal age distribution with early maximum age between 10 and 20 years and then between 40-60 years (6) .Most cases in childhood and young adults are of undifferentiated carcinoma with few diagnosed with non keratinising carcinoma. (7) .

In our case we present a 21 yr old female whose Helical studies of the neck reveals ill defined mass Superiorly extending into the base of the skull on the left side and erodes the floor of middle cranial fossa. Inferiorly the mass extends along the left lateral wall of oropharynx up to the level of lower endplate of C1 vertebrae . With further histopathological evidences revealing Non keratinising nasopharyngeal carcinoma.

Mycobacterium tuberculi which causes tuberculosis which is a highly infectious disease. This usually gets transmitted from one human to another through the respiratory route. The symptoms of tuberculosis includes cough , night sweats , fever. As our patient earlier presented with these symptoms and also in additional resided in the tuberculosis endemic country she was presumed to have tuberculosis and was started with the anti tuberculosis treatment without undergoing high end investigations and biopsy.

The patient's symptoms misled the treating physician to start her with the TB regimen. Proper investigations would have lead us to an early definite diagnosis. Treatment options include chemotherapy which provide promising results.

CONCLUSIONS

There was incongruence between the clinical presentation of the patient and actual diagnosis. A diagnostic nasopharyngeal endoscopy followed by histopathology contributes to the final diagnosis. Additionally helical studies of the neck can be performed which helps in arriving to the above diagnosis. As our patient had minimum metastasis she was treated with chemotherapy effectively . But hypothetically if the degree of metastasis exceeded then it would have influenced the recovery of the patient. This can be documented as a rare case because the diagnosis revealed from the clinical symptoms differed from the investigative diagnosis. Hereby, a proper sets of investigation and early diagnosis must be done and differential diagnosis must always be an option..

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