

*Case Report***Mucosal Malignant Melanoma of the Nasal Cavity - A Rare Case**Minal G. Panchal<sup>1</sup>, Darshan P. Meshram<sup>1</sup>, S.V. Suvernakar<sup>2</sup><sup>1</sup>Assistant Professor, <sup>2</sup>Associate Professor,  
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*Received: 01/05/2014**Revised: 21/05/2014**Accepted: 26/05/2014***ABSTRACT**

Mucosal malignant melanoma of the nasal cavity and paranasal sinuses is a rare entity. It is an unusual cause of nasal obstruction and epistaxis seen especially in elderly. This tends to be an aggressive tumor with poor prognosis. Here we present a case of primary malignant melanoma of nasal cavity in a 56-year-old male presenting with nasal obstruction and epistaxis; along with lymph node metastasis. The rarity of its occurrence warrants its mention.

**Keywords:** elderly, epistaxis, mucosal malignant melanoma, nasal cavity tumor, nasal obstruction.

**INTRODUCTION**

Malignant melanoma is a neoplasia arising from malignant transformation of the normal melanocytes, which are derived from neuroectoderm located in the basal layer of skin, skin annexes and more rarely in mucosal membrane. Common sites for melanomas are head, neck and the lower extremities. Incidence of malignant melanoma as a whole is 2:100,000. Out of these, mucosal malignant melanoma of head and neck account for less than 1%.<sup>[1]</sup> Sinonasal malignant melanoma is an extremely rare tumor with primary mucosal malignant melanoma being more aggressive than its cutaneous counterpart. Sinonasal malignant melanoma represents <1% of all malignant melanomas and <5% of all sinonasal tract neoplasm.<sup>[2]</sup> Prognosis is generally poor and unpredictable. We report a case of primary mucosal malignant

melanoma of nasal cavity in 56-year-old male for its rare occurrence.

**CASE REPORT**

A 56-year-old male patient, presented with the complaints of swelling in left nasal cavity causing nasal blockage, obstruction to breathing and epistaxis since 4 months. There was history of intermittent febrile episodes, occasional blood-tinged sputum, facial pain. On examination, the swelling was a reddish pink colour with brownish discolouration at places, soft in consistency, friable, bleeds on touch; filling the left nostril and protruding through it. General examination shows evidence of enlarged left upper cervical lymph node of size (1.5x1.5), firm to hard, mobile.



Fig.1: Clinical photograph: Swelling arising from the left nostril.

Systemic examination was normal. Evaluation of case demonstrated only mild anaemia with otherwise normal baseline haematological and biochemical profile. Chest X-ray, USG abdomen were normal. X-ray PNS revealed a homogeneous opacity in left nasal cavity with lateral deviation of nasal septum and haziness in left maxillary sinus. Computed tomographic (CT) scan showed homogenous enhancing soft tissue lesion located in nasal cavity extending posteriorly into nasopharynx, medially destroying nasal septum and laterally into left maxillary sinus with suggestive diagnosis of polypoidal mass ?malignancy. On aspiration cytology, only haemorrhagic material seen. Fine needle aspiration cytology of left cervical lymph node showed oval to spindle tumor cells with pleomorphic, hyperchromatic nuclei with intracytoplasmic brownish melanin pigment that led to provisional diagnosis of metastasis in lymph node from malignant melanoma.

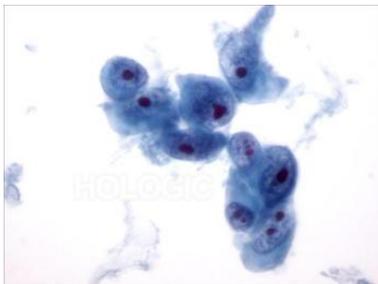


Fig.2: Cytology: Tumor cells showing pleomorphic, hyperchromatic, reddish nuclei with intracytoplasmic brownish melanin. (pap 40x)

Excision of nasal mass along with radical neck dissection was done. Gross examination revealed several bits of blackish, irregular, soft, friable; total of (5x6) cm in size. The haematoxyline and eosin stained section showed diffusely distributed sheets of tumor cells. Tumor cells are spindle with pleomorphic, hyperchromatic nuclei with prominent nucleoli and moderate amount of cytoplasm along with brownish –black melanin pigment in their cytoplasm. The tumor cells are arranged in fascicles, whorls.

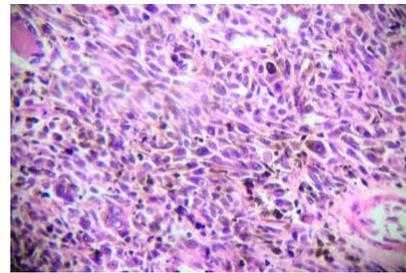


Fig.3: Histopathology: tumor cells arranged in fascicles. (H and E, 10x ).

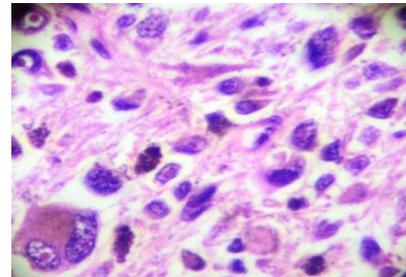


Fig.4: Histopathology: Tumor cells are spindle with pleomorphic, hyperchromatic nuclei with prominent nucleoli and moderate amount of cytoplasm along with brownish –black melanin pigment in their cytoplasm. (H and E, 40x)

The case was diagnosed as primary mucosal malignant melanoma of nasal cavity. Immunohistochemistry revealed tumor cells to be S-100 and HMB-45 positive. This gave the definitive diagnosis of mucosal malignant melanoma of nasal cavity.

## DISCUSSION

Malignant melanomas are neural-crest derived neoplasms originating from malignant transformation of melanocytes in

the basal layer of mucosa. First case of sinonasal malignant melanoma was reported by Lucke in 1869. [1,4] Sinonasal malignant melanoma is an extremely rare tumor and more aggressive than its cutaneous counterpart. They account for <1% of all melanomas and <5% of all sinonasal tract neoplasms. [1] About 5% of nodular melanomas lack pigment (amelanotic melanoma). The tumor occurs between 50-70 years of age and both sexes are equally affected with no sex predilection. [1,5] Common presentations include non-specific symptoms of unilateral nasal obstruction, epistaxis and facial pain. [4]

In the nasal cavity, the most frequent site of occurrence is the nasal septum (anterior portion), lateral wall, inferior turbinate and rarely floor and roof of nose. Its presence in paranasal sinuses is due to its extension. Clinically most patients have symptoms of nasal obstruction or epistaxis or both. The nasal melanomas project into involved cavity and may have a somewhat polypoidal configuration. On examination, nasal melanomas are larger, bulky, friable mass which bleeds with manipulation. Clinically they are indistinguishable from benign polyposis.

Malignant melanomas of nasal cavities and sinuses are characterized by early and repeated recurrences. At presentation 70-80% of cases are localized, 10-20% have regional lymph node, and <10% have distant metastasis. [1,6] However, in our case, the left cervical node metastasis was seen.

Mucosal malignant melanomas tends to be aggressive tumor and overall prognosis and survival rate ranges between

10-40% with mean survival rate ranges being 21-24 months. [2] Poor prognostic factors include local and distant metastasis, local recurrence, vascular invasion and a second primary. [6] Single most powerful predictor is absence of regional lymph nodes. [2] The mainstay of treatment is wide surgical excision; chemotherapy and radiotherapy being not very effective. [1,3]

Primary mucosal malignant melanomas of the nasal cavity are a rare, aggressive tumor with poor prognosis and late detection. So, early diagnosis with high index of suspicion is essential for the management of condition.

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