

# Sinonasal Mucosal Melanoma: A Case Report

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**Abstract:** 79 - year - old diabetic and hypertensive patient presented with complaints of right sided epistaxis and nasal block of 3 weeks duration. She also complained of periorbital oedema and watering of right eye for 1 week. Clinical examination and diagnostic nasal endoscopy showed a pinkish proliferative mass filling the right nasal cavity which was found bleeding on touch. CECT showed a lobulated hyperdense lesion with post contrast enhancement occupying right paranasal sinuses and medial compartment of extraconal space of right orbit. CT angiogram was suggestive of a vascular tumour with feeders from right facial artery, sphenopalatine artery, ophthalmic artery and right ACA. Patient underwent radical excision of the tumour. Intraoperatively the tumour appeared greyish to black in colour and was friable. Histopathological examination along with immunohistochemistry was consistent with Sino nasal Melanoma. Considering the age and general condition of the patient, she was referred to a higher oncologic centre for palliative care.

**Keywords:** Sinonasal Mucosal Melanoma

## 1. Introduction

Sino nasal melanomas are rare and aggressive tumours accounting for just 0.5 - 2% of all melanomas and 3% of all head and neck tumours. Appearance varies from blackish blue to pale yellow to translucent. IHC is positive for Vimentin, S100, HMB 4. Surgical excision with chemoradiation is the treatment of choice.

## 2. Case Report

79- year - old diabetic and hypertensive female patient presented with complaints of bilateral nasal bleeding and nasal block for 3 weeks and periorbital oedema and increased watering from the right eye for a duration of 1 week.

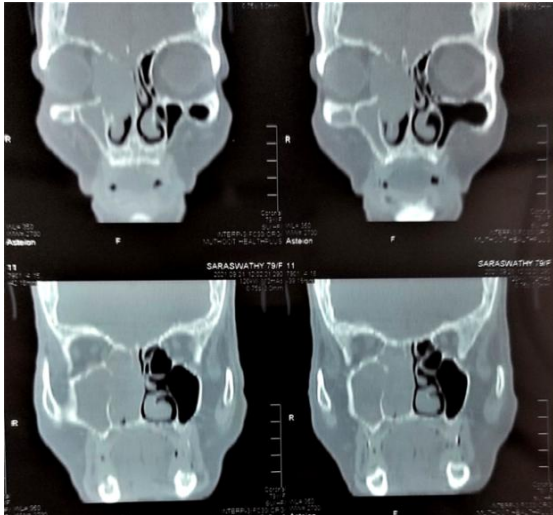
Anterior rhinoscopy revealed a pinkish proliferative mass completely filling the right nasal cavity that profusely bled on touch. Diagnostic Nasal endoscopy confirmed the clinical findings. (Fig1) Restriction of adduction was noted in the right eye on accessing the extra ocular movements. Patient was admitted and evaluated.



**Figure 1:** Diagnostic nasal endoscopy showing bleeding nasal mass

A contrast enhanced CT scan of nose and paranasal sinus was obtained which showed a 2 x 4.7 x 3 cm lobulated hyperdense soft tissue lesion with post contrast enhancement occupying right nasal cavity and anterior ethmoid sinuses, extending to the right frontal sinuses superiorly, medial compartment of extraconal space of right orbit laterally and mild extension into the right maxillary ostium with bone erosion of inferomedial wall of right frontal sinus, right lamina papyracea, ethmoid lamella and nasal septum. (Fig 2 and Fig3)

Given the high clinical suspicion of a vascular tumour a CT angiogram was also done which confirmed the findings of previous CT and confirmed the high vascular nature of tumour with feeders from right facial artery, sphenopalatine artery, ophthalmic artery and A2 segment of right ACA. Expert opinion was sought from interventional radiology department regarding pre operative embolization of the tumour, but since the ophthalmic artery was involved, the procedure was deferred due to high risk of vision loss.



**Figure 2:** Plain CT Nose and PNS showing right sided Sino nasal mass



**Figure 3:** Contrast enhance CT scan of Nose and PNS showing post contrast enhancement

Patient was taken up for surgery. Intraoperatively the tumour showed profuse bleeding and interestingly the appearance was noted to be greyish to black and the consistency soft to friable. (Fig 4) The tumour was completely cleared off its attachments from the nose as well as the paranasal sinuses

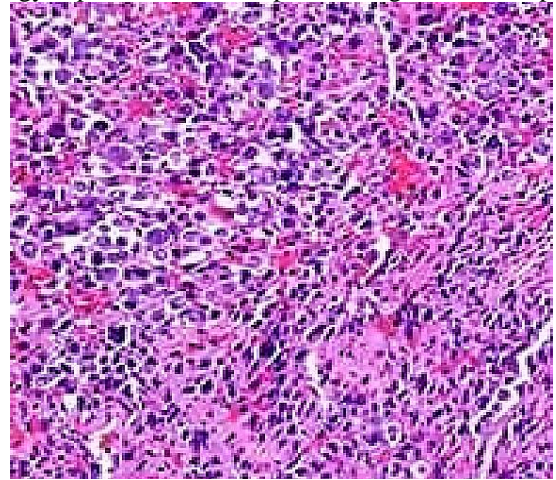


**Figure 4:** Gross appearance of the specimen

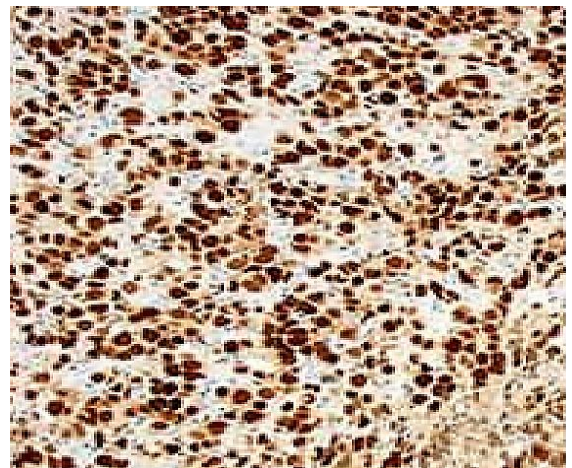
Specimen was sent for histopathological examination, which revealed clusters and sheets of malignant cells that stained positive for S100 and negative for Cytokeratin in

immunohistochemistry, a finding consistent with the diagnosis of a Sino nasal mucosal melanoma (Fig 5 and Fig 6)

Considering the age and multiple co morbidities of the patient was put on palliative therapy as advised by the oncology department and is kept under regular follow up



**Figure 5:** Histopathology showing clusters of malignant cells



**Figure 6:** Immunohistochemistry showing S100 positivity

### 3. Discussion

Sino nasal mucosal melanomas are rare and aggressive tumours which constitute 0.5 - 2% of all melanomas and 3% of all head and neck tumours. Gross appearance of the tumour ranges from blackish blue to pale yellow. Immunohistochemistry positive for Vimentin, S100 and HMB 45 used chemotherapeutic agents Immunotherapy in some cases.

### 4. Conclusion

The causes of a bleeding nasal mass can vary from a simple infected nasal polyp to even more sinister causes. The aggressive nature of the tumour combined with a 5year survival rate of less than makes it imperative for clinicians to keep the diagnosis of a Sino nasal mucosal melanoma in mind while evaluating any bleeding nasal mass.

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