

A Rare Case of Primary Squamous Cell Carcinoma of Nasal Septum

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ABSTRACT

Malignancy of nasal cavity and paranasal sinuses are considered to be rare accounting for less than 1% of all malignancies and 3% of head and neck cancers. Primary squamous cell carcinoma of nasal septum is deemed to be extremely rare. The published series and case report have been too few to allow existence of its own staging system.

Further, because of its rarity, the disease is often misdiagnosed as its symptoms are similar to everyday nasal symptoms. We report a case of a 40-year-old woman who was complaining of blocked nasal passage and epistaxis for 5 years and squamous cell carcinoma was found on biopsy.

Keywords: Nasal Septum; Squamous Cell Carcinoma; Recurrent Epistaxis; Wide Local Excision

INTRODUCTION

Primary squamous cell carcinoma of nasal septum affects less than 1% of sinonasal malignancy. Typically, certain occupations such as woodwork, leatherwork and nickel refining have been identified as risk factors for this type of malignancy. Other risk factors include cigarette smoking which is associated with an increased risk of squamous cell carcinoma. However, a detailed examination of these association is lacking due to limited number of reported cases [1].

The most common presenting symptom is nasal obstruction followed by epistaxis [2]. The treatment modalities for the primary squamous cell carcinoma of nasal septum include surgery, radiation or both [3].

We report a case of a 40-year-old woman who was complaining of blocked nasal passage and epistaxis for 5 years and squamous cell carcinoma was found on biopsy.

CASE REPORT

A 40-year-old, 6 week-pregnant woman presented with complained of left nasal blockage and epistaxis for a month. On further questioning, she had been experiencing left nasal blockage for 5 years with few episodes of sudden

onset of epistaxis from the offending side. Epistaxis was large in amount of blood, sudden in onset, and happened often at night.

The epistaxis episodes had stopped but recurred during this pregnancy. Patient did not have postnasal drip, anosmia, facial swelling, or constitutional symptoms. She also denied neck swelling and, throat or ear symptoms. She was a housewife and denied exposure to wood/nickel or leather.

On examination, there was a suspicious mass in the left nostril on anterior rhinoscopy. Rigid nasoendoscopy showed an irregular mass over the mucosa of the middle part of the septum, measuring 2 x 1cm (Figure 1). It was fragile and easily to bleed. No neck swelling was palpable during examination.

A biopsy of the suspicious lesion was taken, and the histopathology showed high-grade dysplasia, highly suspicious for adjacent malignancy. She did not undergo imaging as she requested to resume her treatment after her delivery.

After delivering a baby, patient presented again and reported that the epistaxis had worsened, however, she had no anemia symptoms. She underwent examination under anesthesia and another biopsy was taken. Histopathological examination showed non keratinizing squamous cell carcinoma.

Contrast enhanced computed tomography for

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Figure 1: Rigid nasoendoscopy findings showed irregular mass over mucosa of the middle part of the septum (black arrow)

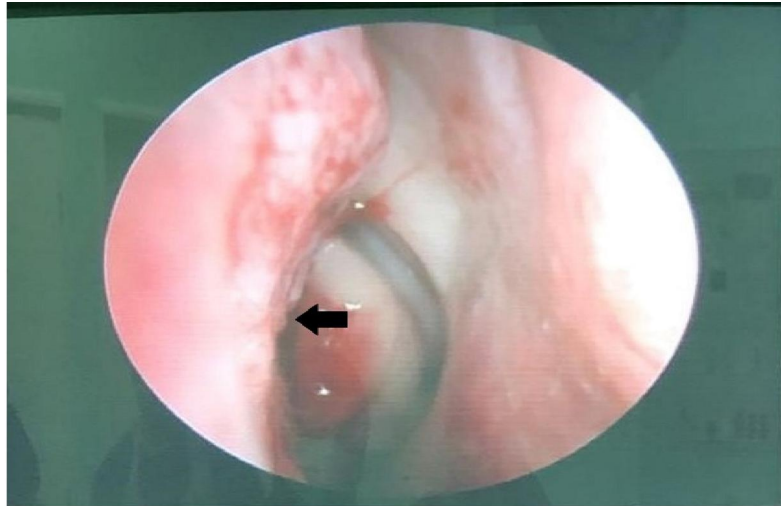
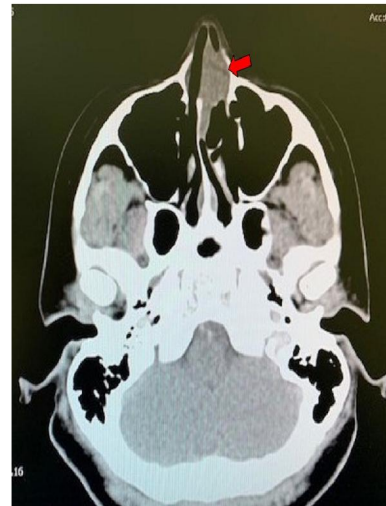


Figure 2a: CT Paranasal Sinus: Axial cut (bone window) revealed no adjacent bony erosion

Figure 2b: CT Paranasal Sinus: Axial cut (soft tissue window) revealed a soft tissue density is seen within the left nasal cavity (isodense to turbinates), appears arising from the nasal septum. (red arrow)



staging showed a soft tissue density within the left nasal cavity (isodense to turbinates), arising from the nasal septum. The density measured about 1.8cm x 0.6cm x 2.8cm with no clear fat plane with the inferior turbinate (Figure 2a, Figure 2b).

In addition, there was a metastatic lesion to the left proximal humerus which was confirmed on x-ray (Figure 3).

Patient underwent wide local excision of the nasal septum. The mucosa and cartilaginous part of septum were sent for histopathological examination and confirmed non-keratinizing

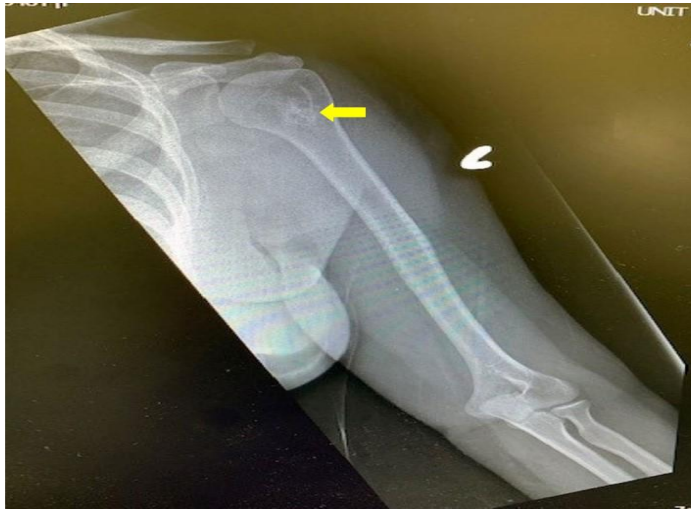
squamous cell carcinoma. Frozen samples taken from the surgical border were tumour free.

Postoperative radiotherapy was administered, and the patient recovered fully following radiotherapy. There were no signs of local recurrence after 1 year of follow up. The left humeral lesion remains stable, and patient is asymptomatic.

DISCUSSION

The sinonasal tract encompasses of paranasal sinuses and nasal cavity. The nasal cavity is

Figure 3: Xray of left humerus showed lytic lesion at head of left humerus (yellow arrow)



further divided into 4 subsites: septum, floor, lateral walls and vestibule. Sinonasal tumors are rare and about 50% of the tumors are benign. Malignancies of sinonasal tract are about 3% of all head and neck tumors [4].

Squamous cell carcinoma is the most common type of malignant tumor of the nose and comprises 50%-80% of all nasal malignancies. Other types include adenocarcinoma, adenoid cystic carcinoma, olfactory neuroblastoma, sinonasal undifferentiated carcinoma, minor salivary gland tumors, and melanoma [4].

Symptoms of the squamous cell carcinoma of the nasal septum may include nasal obstruction, epistaxis, nasal mass, pain and rhinorrhea. These symptoms may be neglected for years by patients. With advanced disease, patients may present with epiphora, diplopia, nasal mass or palatal ulceration.

The disease is often staged according to degree of local involvement; stage 1—limited to site of origin, stage 2—extension to adjacent sites (e.g. orbit, nasopharynx, paranasal sinuses, skin, pterygomaxillary fossa), and stage 3—invasion of skull base, pterygoid plate destruction, and/or intracranial extension [5].

Squamous cell carcinoma of the nasal septum is treated with multi-modality therapy involving surgery and radiotherapy. Radiotherapy is particularly important postoperatively in patients with advanced disease. However, radiotherapy can also be given to patients with non resectable tumor.

Prognosis of this disease was not well established because of the small number of cases until recently. Fornelli et al has reported an absolute 2-year survival of 69% and an overall 5-year

survival of 50%. Involvement of 2 or more nasal subsites has significantly decreased survival rate [6]. These figures are validated by another study with 783 cases and found a 5- year survival of 60% [7].

CONCLUSION

Primary malignant tumors of the nasal septum are rare. The symptoms of the disease might be deemed trivial by the patients, at least initially. However, a detailed and thorough examination leads to the correct diagnosis. Diagnosis and treatment at early stage of the disease may improve prognosis.

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