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Case Series

Rare cases of nasal mass with bleeding: case series

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ABSTRACT

A thorough evaluation of nasal masses along with early management of the disease can prevent complications and further deterioration of the disease to a larger extent. Nasal mass occurring in the nose with symptoms of epistaxis is a sign of suspicion of malignancy. Patients can have variable presentations according to the site and extent of the infection. This article comprises of study done on 3 patients who presented to the ear, nose, and throat (ENT) out patient department with nasal mass with bleed. All three of the patients were subjected to clinical examination, diagnostic nasal endoscopy, radiological evaluation, surgical intervention and histopathological assessment. Thorough evaluation helps the operating surgeon to come to a specific diagnosis so that the chances of diagnosing rare cases does not get ruled out and helps the further deterioration of the disease.

Keywords: Nasal masses, Epistaxis, Malignancy

INTRODUCTION

Tumors of the nose and paranasal sinuses are uncommon and the diagnosis by the head and neck surgeon will only be a handful of such cases. Cancer of the nose especially may present with protean symptoms, which may attract attention only after a delay, while cancer of the sinuses is encountered only rarely while confined within the cavity, and almost without exception presents as an extended disease.[3] Malignant tumors of the sino-nasal tract account for 0.2 to 0.8% of all human malignancies and 3% of malignant tumour of upper aerodigestive tract. The biopsy of nasal and sinus lesion should be aggressive in lesions which are suspicious and that do not respond to the conservative management. The symptoms in patient with tumors of the nose and paranasal sinuses are unilateral nasal obstruction (48%), facial swelling (41%), nasal discharge (37%), epistaxis (35%), nasal symptoms include obstructive symptoms of rhinitis and sinusitis, which are identical to those of early carcinoma. Unilateral nasal obstruction, or rhinorrhoea particularly if blood stained, is suspicious for malignancy, local extension factors that were associated with a worst prognosis included extension to the pterygomaxillary fossa, extension to the frontal and sphenoid sinuses, the erosion of the cribriform plate, and invasion of the dura.[1] A provisional diagnosis was made after clinical assessment and radiological investigation but final diagnosis was made after histopathological examination.[6]

CASE SERIES

Case 1

A 14-year-old female patient, without any comorbidities presented to the OPD with complains of pain over the left side of the face for 10 days, which was insidious and gradually progressed in the course of 10 days. She also complains of 1 episode of epistaxis with blood loss of 2-3 ml from the left side of nose. Diagnostic nasal endoscopy revealed nasal mass arising from left middle turbinate and completely obscuring view at middle turbinate

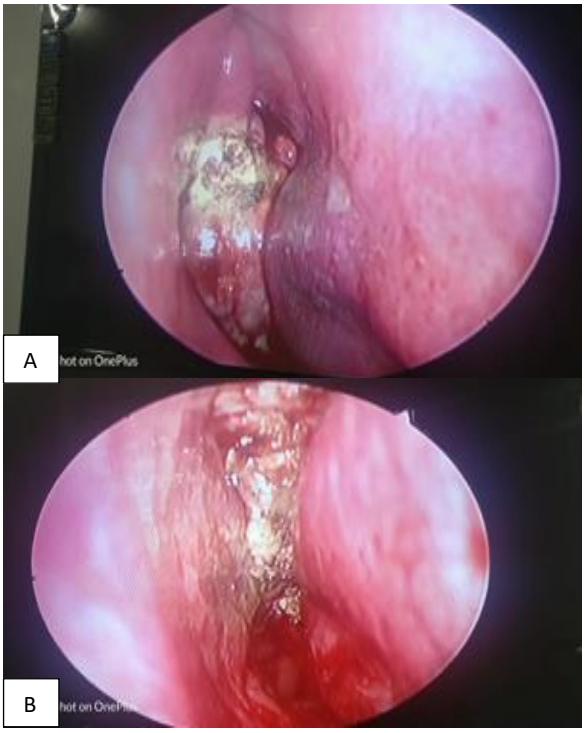

Figure 1 (A and B): Nasal mass arising from left middle turbinate.

Computerized tomography scan of the paranasal sinuses (CT-PNS) revealed hemangioma from left middle turbinate (Figure 1).

The patient underwent pre-op angioembolisation of internal axillary branch of left ECA.

Following which complete endoscopic excision of nasal mass with cauterisation of stump of tissue and was sent for histopathological examination (HPE). HPE revealed the diagnosis of rhabdomyosarcoma of left nasal cavity.

Case 2

A 70-year-old post-menopausal female came with complaints of left sided nasal blockage, headache, since 4 months. Patient also gives history of 2 episodes of epistaxis, each episode with a loss of 3-5 ml. Diagnostic nasal endoscopy showed nasal mass arising from left inferior turbinate. CT-PNS showed polyp arising from superior part of left inferior turbinate (Figure 2).

She also presented to the general surgery OPD with skin dimpling over right breast in the upper quadrant and was diagnosed with CA right breast p0pt2pN1M0 (Figure 3).

Patient underwent mastectomy and axillary clearance for right breast leasion and Functional endoscopic sinus surgery (FESS) with trans-nasal polypectomy and sent for HPE. Breast lesion came as infiltrating duct CA ad nasal lesion as adenoid cystic carcinoma.

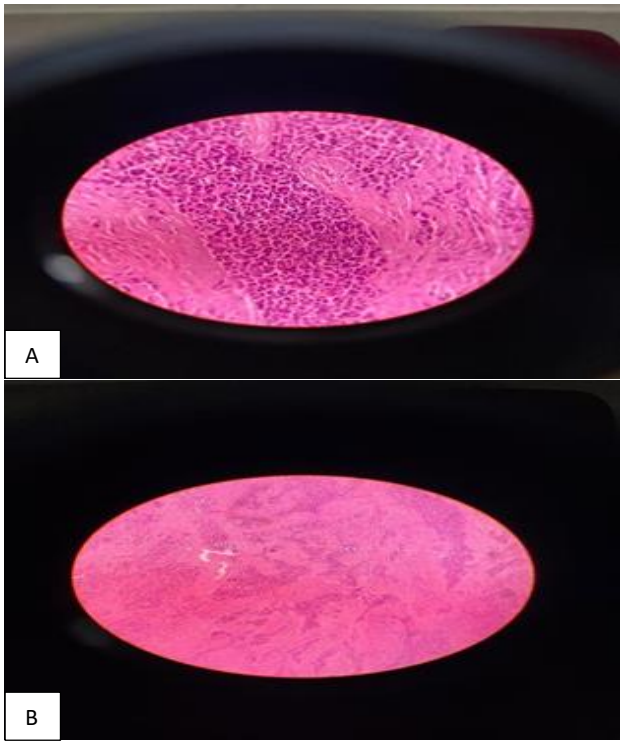

Figure 2 (A and B): High and low power histology of rhabdomyosarcoma.

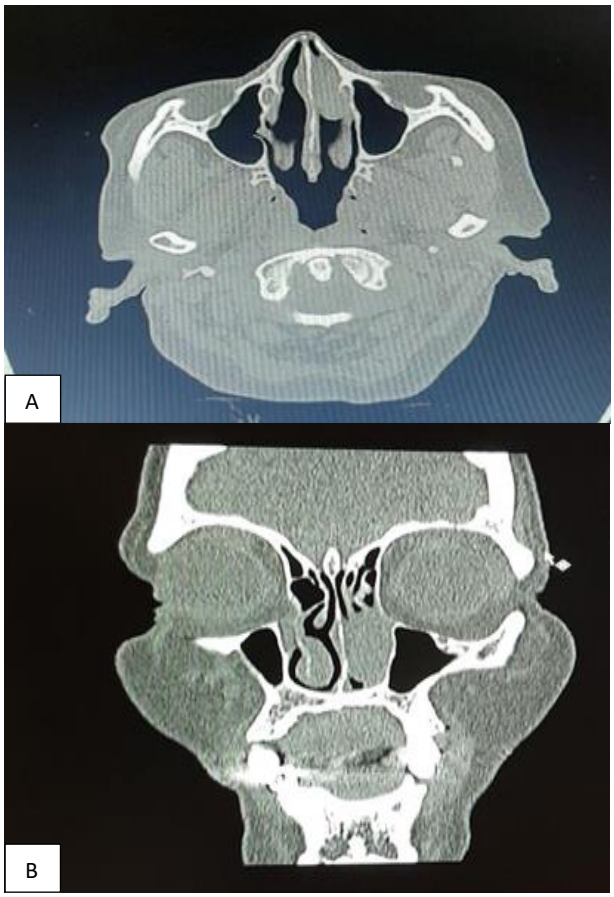

Figure 3 (A and B): CT-PNS of polyp arising from the superior part of left middle turbinate.

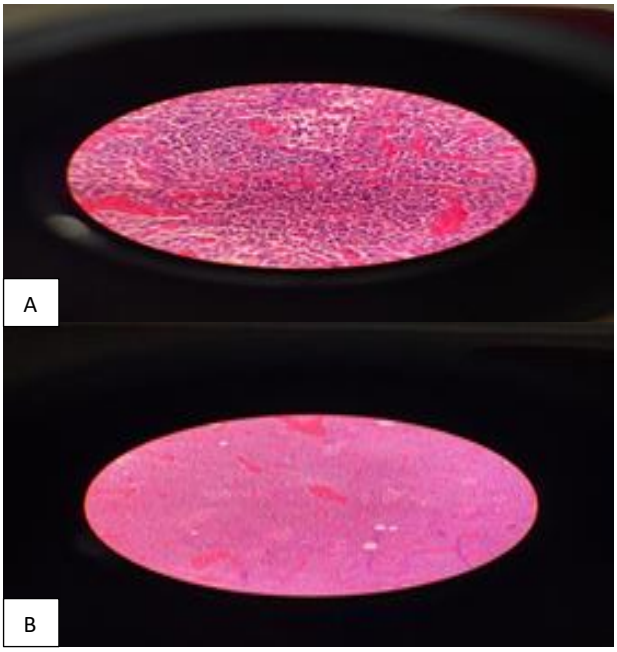

Figure 4 (A and B): High and low power histology of adenoid cystic carcinoma.

Case 3

12-year-old male patient presented to ENT OPD with history of epistaxis from left nostril since 8-10 days, each episode lasting for about 10-15 minutes with a loss of about 5-10 ml. Diagnostic nasal endoscopy showed bleeding polyp arising from left inferior turbinate, attached to left uncinate extending to the left posterior choanae and to the nasopharynx. CT-PNS shows suggestive of juvenile nasopharyngeal angiofibroma.

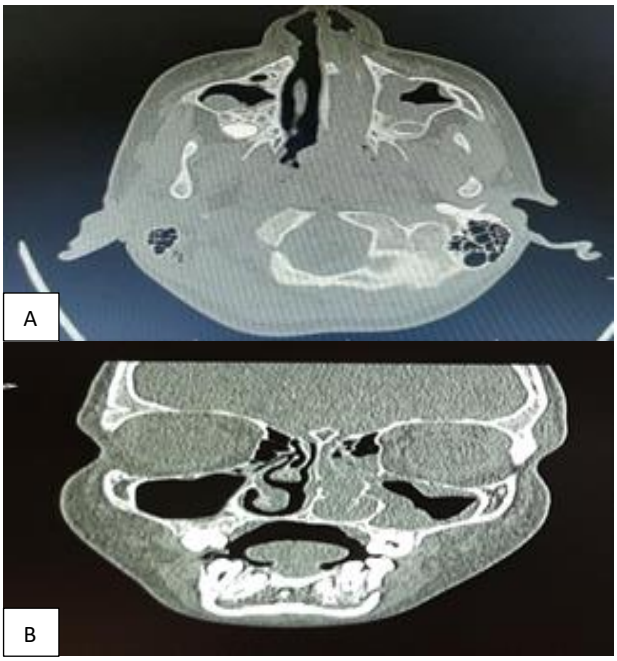

Figure 5 (A and B): CT-PNS of polyp arising from left inferior turbinate.

Patient underwent digital subtraction angiography with predominant tumor feeders noted from b/l external carotid arteries, major feeders from b/l internal maxillary arteries, facial artery branches and left ascending pharyngeal artery were cannulated and embolized. Post embolization tumor devascularization was achieved with absence of tumor blush.

Patient underwent FESS with endoscopic excision under general anesthesia and sent for histopathology which stated juvenile nasopharyngeal angiofibroma.

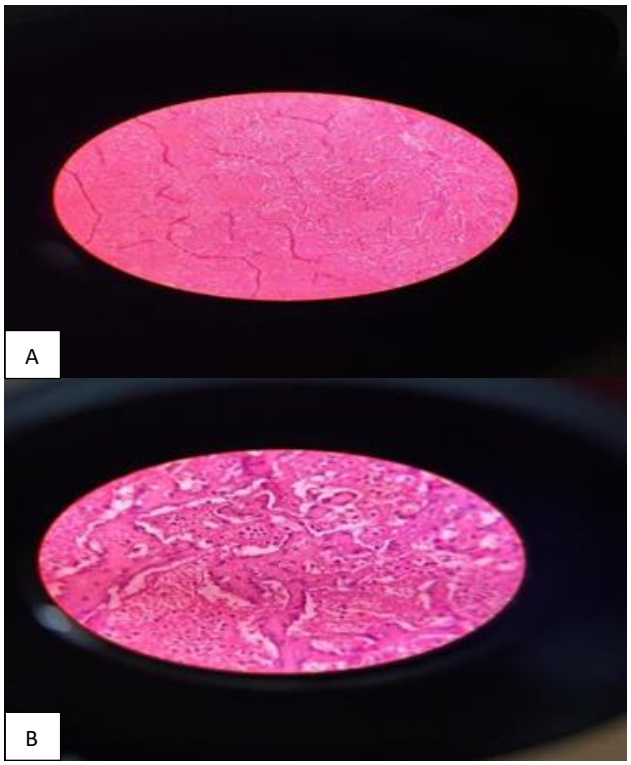

Figure 6 (A and B): Low power and high power of juvenile nasopharyngeal angiofibroma.

DISCUSSION

Rhabdomyosarcoma is the most common soft tissue malignant tumor found in patients less than 15 years of age. Occurrence in the head and neck accounts for more than 40%. rhabdomyosarcoma of nasopharynx and paranasal sinuses account for 25 to 20% of extra orbital cases. In the head and neck most prominent type of tumor is the embryonal form, followed distantly by alveolar form. Because of the age group involved, early nasopharyngeal rhabdomyosarcoma is usually misdiagnosed as adenoid hypertrophy. During removal of nasal masses, if the surgical margins are free of tumor, the prognosis is relatively good in comparison with other sarcomas of nose and paranasal sinuses. Survival is directly related to the extent of disease at diagnosis.[4] The presence of cervical adenopathy, bone erosion, or CNS spread implies locally extensive disease with poor prognosis.[4]

Adenoid cystic carcinoma: one third of all salivary gland tumors in the nose and sinuses and half of the salivary gland tumors in the nasopharynx are adenoid cystic carcinomas. They are also known as cylindromas based on their histologic appearance. In general, these are more frequent than the usual adenocarcinomas and are aggressive tumors.[2] Adenoid cystic carcinomas of nose and paranasal sinuses have the poorest prognosis of all cylindromas, which is due to both their late diagnosis and their tendency toward early perineural invasion.

Juvenile nasopharyngeal angiofibroma is an uncommon benign, but locally destructive tumor. It accounts for 0.05% of head and neck tumors and is found exclusively in adolescent boys.

Grossly tumor is usually seen to fill one or both sides of nasopharynx and extends into nasal cavity. The tumor is pink to red, lobulated and rubbery. The main blood supply in juvenile nasopharyngeal angiofibroma is the ipsilateral internal maxillary artery. The treatment of angiofibroma has changed over the year, currently surgery is the preferred treatment. There is no role at present for hormone therapy in juvenile nasopharyngeal.

Most of non-neoplastic and benign neoplastic nasal masses require surgical excision, while malignant neoplastic nasal masses require wide surgical excision, radiotherapy or chemotherapy either alone or in combination. Regular follow up is necessary for early detection of recurrence or metastases.[5]

CONCLUSION

A variety of masses may involve the nose, nasal cavity, and nasopharynx. These lesions may be secondary to congenital and development anomalies, inflammatory and infectious processes, neoplasms or trauma. Lesion may arise from structures of nose, adjacent structures or nasal, nasopharyngeal mucosa. Depending on the lesion, patient may present with a variety of symptoms because the symptoms frequently are not specific to any one disorder, imaging can be helpful in determining the site of origin and involvement of other structures and guiding the clinicians presurgical planning for those condition for which surgical treatment is required .In most patients imaging characteristics can be used to narrow the differential diagnosis with the help of histopathological examination enabling clinician to suggest a specific diagnosis and thus prevent complications and further deterioration of the disease.

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