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Case Report

Osseous hemangioma of nasal cavity

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ABSTRACT

Osseous hemangiomas are uncommon, constituting less than 1% of all osseous neoplasms. Most commonly affects maxilla, mandible & nasal bones. We report a case of an osseous hemangioma of nasal cavity. Cavernous hemangioma of the nose is a rare lesion and is one of the differential diagnosis of an intranasal bleeding mass.

Keywords: Cavernous hemangioma, Osseous, Nasal cavity, Intranasal bleeding, Maxilla, Mandible, Nasal bone

INTRODUCTION

Hemangiomas are benign vascular tumours, which originate in the skin, mucosae, & deep structures such as bones, muscles & glands. They are of two major types, capillary & cavernous. A wide variety of tumours occur in the nasal cavity.[1] Hemangioma of the nasal cavity occurs most commonly on the septum (65%), lateral wall (18%) & vestibule (16%).[2] Nasal hemangiomas mostly arise from the soft tissues of the nasal cavity & also occur as solitary lesion in bones. These tumours account for only 0.7% of all primary bone tumours.[3] Intraosseous hemangiomas usually occur in the vertebral column & skull bones. Intraosseous hemangioma of the nasal cavity is extremely rare.[4]

CASE REPORT

A 58 year male was admitted in our hospital with complaints of recurrent epistaxis & nasal obstruction since 10 years & nasal pain since 8 days. Anterior rhinoscopic examination revealed a mass obstructing Rt. nasal cavity.

CT scan report - A 5x4x4.5 cm sized solid mass is seen in the Rt. nasal cavity arising from turbinates/medial wall of maxillary antrum. There are multiple irregular areas of coarse calcification seen in the mass. The mass is involving Rt. ethmoidal air cells & thinning the nasal septum & medial wall of Rt. maxillary antrum. Mucosal thickening is seen in the sphenoidal sinus on the right.

The mass is seen abutting but not breaching the Rt. cribriform plate. No e/o extension of the mass into cranial cavity is seen. No extension beyond nasal cavity is seen.

On intravenous iodinated contrast medium administration there is intense heterogenous enhancement seen in the mass.

Impression - Findings of intense enhancing nasal mass with coarse calcification are s/o chondroid malignancy.

We received a mucosa covered tissue mass measuring 4x3x1 cm. External surface show glistening gritty appearance. Cut surface shows blackish haemorrhagic areas along with focal cartilaginous ? bony areas.

Histopathological study of the tumour showed large blood-filled spaces lined with flattened endothelium & scattered pieces of bony trabeculae in between these spaces.

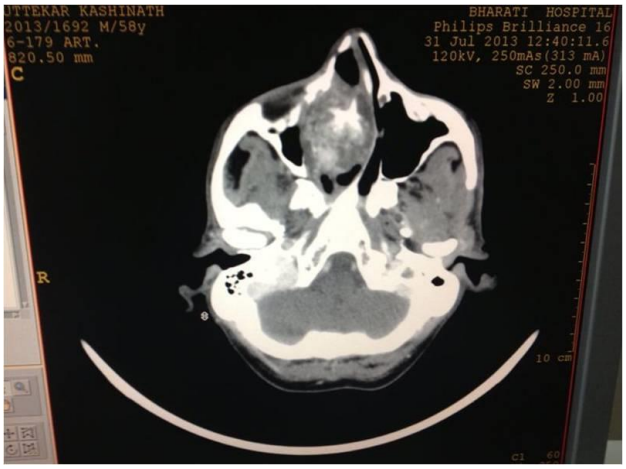

Figure 1: CT scan - A 5x4x4.5 cm sized solid mass in the Rt. Nasal cavity arising from turbinates/medial wall of maxillary antrum.

Figure 2: CT scan - A 5x4x4.5 cm sized solid mass in the Rt. Nasal cavity arising from turbinates/medial wall of maxillary antrum.

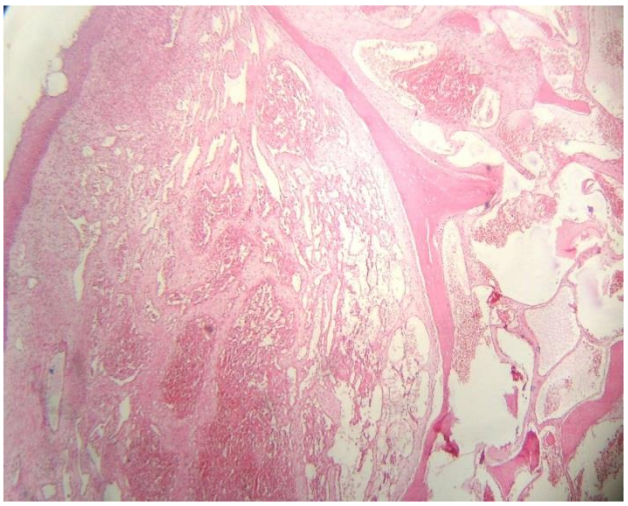

Figure 3: H. P. - Tumour showed large blood-filled spaces lined with flattened endothelium & scattered pieces of bony trabeculae in between these spaces.

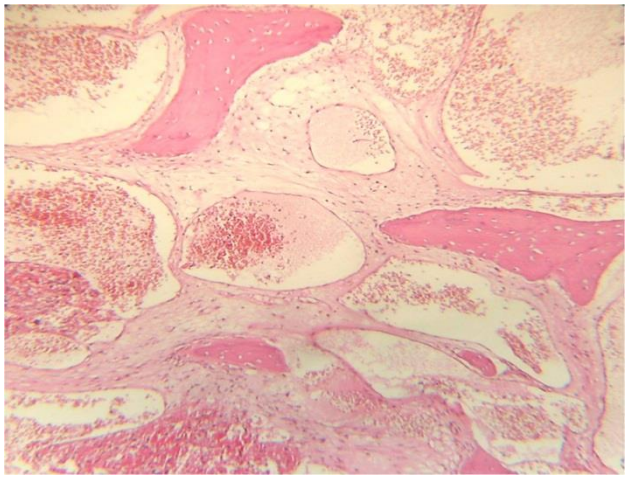

Figure 4: H. P. - Tumour showed large blood-filled spaces lined with flattened endothelium & scattered pieces of bony trabeculae in between these spaces.

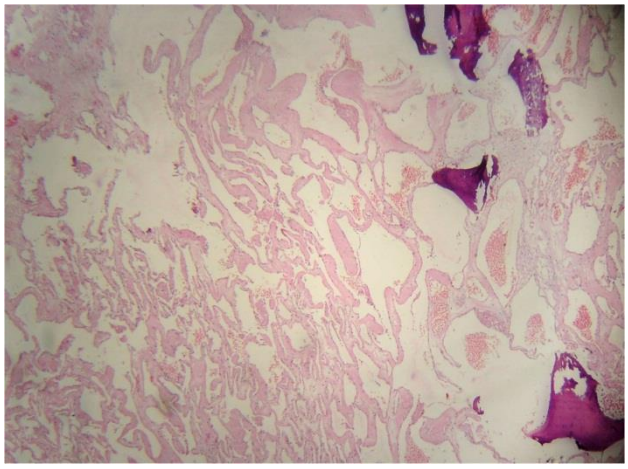

Figure 5: H. P. - Tumour showed large blood-filled spaces lined with flattened endothelium & scattered pieces of bony trabeculae in between these spaces.

DISCUSSION

Although hemangiomas are common lesions of the head & neck, those of the nasal cavity & paranasal sinuses are rare. Mnay different classification systems for hemangiomas have appeared in the literature, with histological subtyping being the most widely accepted. Thus, depending on the dominant vessel size at microscopy, hemangiomas are divided into capillary, cavernous & mixed types.[1] Cavernous hemangiomas are composed of large endothelium-lined vascular spaces.[5]

Cavernous hemangiomas with a location at the nose or paranasal sinus are uncommon. They have been described arising from the inferior turbinate,[6,7] vomer,[8] & maxillary sinus.[9]

Hemangiomas of the bone is a rare benign tumour accounting for less than 0.8% of primary bone

neoplasm.[10] Intraosseous hemangiomas of nasal bone are extremely rare. In a series of 45 patient with hemangioma of bone, Sherman & Wilner (1961) found one involving the nasal bone.[11] The largest study by Osborn in 1959, reviewed 51 patients with hemangiomas of the nose seen over an 11 year period. Of these 51 cases, only 2 cases were of cavernous variety.[12]

The first report was written by Nievert & Bilchick (1930) & review of the subject was undertaken by Bridger (1976).[13]

Mean age at presentation of cavernous hemangiomas of nasal cavity is about 40 year & sex incidence appears equal.[14]

This tumour when symptomatic, produces recurrent epistaxis or hemoptysis & nasal obstruction.[14,15]

The presence of a bleeding mass in the nasal cavity is consistent with various benign & malignant lesions & the definitive diagnosis is made by histological confirmation of the surgical specimen.[16]

The X-ray appearance of the lesion is very characteristic with trabeculations &/or radiations from a central point, within an oval radioluscent area, giving the "Sun burst" appearance. The "honey-comb" pattern can also be seen on CT scan of nasal bone.[17,18]

The differential diagnosis of the nasal hemangiomas includes inverted papilloma, olfactory neuroblastoma, lumphoma, lymphangioma, glomangioma, melanoma arteriovenous fistula, hemangiopericytoma & hemangioendothelioma.[16]

Many forms of treatment have been advocated to cure hemangiomas with surgical resection of tumour, with a cuff of surrounding uninvolved tissue & ligation or cautery to the feeding vessels, being the most successful.[14] Other methods of treatment including cryotherapy, corticosteroid treatment, sclerosing solutions & resection using YAG laser have been used with differing results.[19]

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