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Glomangiopericytoma Of The Nasal Cavity : A Rare Case Report

Medical Science

KEYWORDS : medical students, stress, coping mechanisms

*** Dr Lavanya. M** — Postgraduate, Department of ENT, MVJMCRC, Hoskote, Karnataka. * Corresponding author

Dr Nagaraj. BT — Professor, Department of ENT, MVJMCRC, Hoskote, Karnataka

ABSTRACT

Background: Glomangiopericytoma is a rare sinonasal neoplasm characterized by a perivascular myoid phenotype and is considered as distinct from conventional soft tissue hemangiopericytoma. This case is presented because of its rarity.

Case report: A 36-year-old woman presented to the Outpatient Department of ENT, MVJMC&RH, Hoskote, Karnataka with complaints of progressive unilateral nasal obstruction and anosmia over a 6 month period. Anterior rhinoscopic examination revealed a pinkish globular mass occupying the left nasal cavity. Computed tomography (CT) scan revealed an ill defined homogenous soft tissue density lesion involving the left nasal cavity, infiltrating the nasal septum posteriorly and extending up to the choana with a deviated nasal septum to the right side. The tumor was resected completely by endoscopic approach. Histopathologic examination with immunohistochemistry of the resected mass confirmed the diagnosis of glomangiopericytoma.

Conclusion: This tumour is associated with a very good prognosis following surgery and complete surgical resection with negative margins preferably via a transnasal endoscopic approach is the treatment of choice.

Introduction

Glomangiopericytoma is, according to the World Health Organisation 2005 classification of head and neck tumors, a recent proposed term describing the sinonasal tumors demonstrating a perivascular myoid differentiation. Glomangiopericytoma, sinonasal type hemangiopericytoma, is a rare tumor and usually of borderline low malignant potential [1,2,3]. It differs from conventional soft-tissue hemangiopericytoma in location, clinical and histolpathogic features [4,5]. We present a case of glomangiopericytoma arising in the left nasal cavity, which was treated by endonasal surgery.

Case report

A 36 year old female came to the Department of ENT OPD, MVJMC&RH, Hoskote with the problem of left sided nasal obstruction from last 6 months. She had history of one episode of left sided nasal bleed 2 weeks prior and also previous nasal surgery (FESS) 10 years ago. The patient was Conscious, oriented, Afebrile, No pallor/ icterus / cyanosis / clubbing / generalised lymphadenopathy/ pedal oedema was observed. In the systemic examination CVS was S1, S2 +, bilateral air entry was normal and no added sounds. The per abdomen soft, non-tender, BS + and no central nervous deficits. The external framework and vestibule was normal. Anterior Rhinoscopy was done on patient and it was observed that pinkish sessile mass present in the left nasal cavity, on probing it was insensitive and did not bleed on touch. The mass could be probed all around except medially DNS to right and No PNS tenderness.

Investigations

The general blood investigations were done in Central Lab (Table-1), Nasal endoscopy (Table-2 and Image-1,2 &3), plain CT was done for paranasal sinuses (Image 4,5&6) and histology of left nasal mass was done by standard procedures. In the CT scan an ill defined, homogenous, soft tissue density lesion noted involving left nasal cavity, infiltrating the nasal septum posteriorly and extending upto the choana and DNS to right. In the histology it was observed that tissue fragments lined by respiratory epithelium and underlying subepithelium consisting of well delineated diffuse growth of tumor cells arranged in the form of interlacing short fascicles and whorls. The tumor cells were round to elongated with vesicular to hyperchromatic nuclei and scanty eosinophilic cytoplasm. Dilated ectatic blood vessels with hyalinization were present (Picture-1).

Discussion

Recent proposed term describing the sinonasal tumors demonstrating a perivascular myoid differentiation (WHO 2005 classification of head and neck tumors). Rare tumor-borderline low malignant potential. Differs from conventional soft-tissue hemangiopericytoma in location, clinical and histopathologic features. < 0.5% of all sinonasal tumors. Majority of patients present with unilateral nasal obstruction and/or recurrent epistaxis [6]. Imaging studies (CT scan, MRI) demonstrate non calcified soft-tissue mass in a nasal fossa or a paranasal sinus. The diagnosis of a glomangiopericytoma is based on histopathology. Hematoxylin–eosin staining reveals a subepithelial circumscribed but unencapsulated cellular tumor, surrounded by a normal respiratory epithelium and is comprised of tightly packed small cells interspersed with many vascular channels [7]. Immunohistochemically, glomangiopericytoma can also be distinctly different from soft-tissue hemangiopericytoma by characteristic diffuse reactivity for actins, factor XIIIA and vimentin [8,9]. Endoscopic endonasal removal has been selected as a less invasive tumor resection method [10]. Recurrence, often due to incomplete tumor resection, develops in up to 30% of cases, making necessary a regular post-operative follow-up.

Table-1: Biochemical investigations

Blood investigation	Value
Total Count	9900 Cells/cu.mm
Differential count	
Neutrophils	70
Leuckocytes	26
Eosinophils	4
Hemoglobin	10.1 gm%
ESR- 30 min	20
At 1 hour	48
Platelet count	3.11 lakhs/cu.mm
Bleeding time	4.30 min
Clotting time	5.30 min
Random blood sugar	110 mg/dl
Urea	28 mg/dl
Creatinine	0.8 mg/dl

Table-2: Diagnostic nasal endoscopy

Diagnostic nasal endoscopy	RIGHT	LEFT

1st pass	Nasopharynx free Eustachian tube patent DNS to right	Pink globular mass seen occupying left nasal cavity and extending upto choana and arising from the nasal septum
2nd pass	Middle meatus : Normal Middle turbinate : Normal	Middle meatus : Maxillary and ethmoid sinus ostia widely open Middle turbinate : Normal
3rd pass	Normal	Normal

Image-1,2 & 3: Nasal Endoscopy

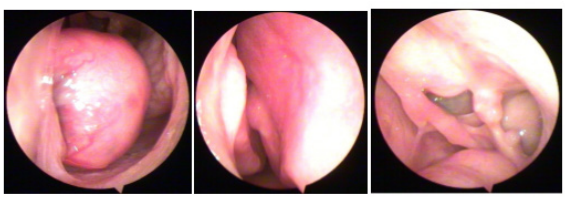
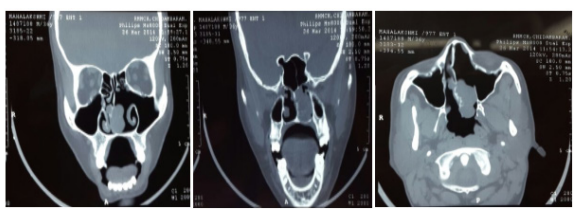
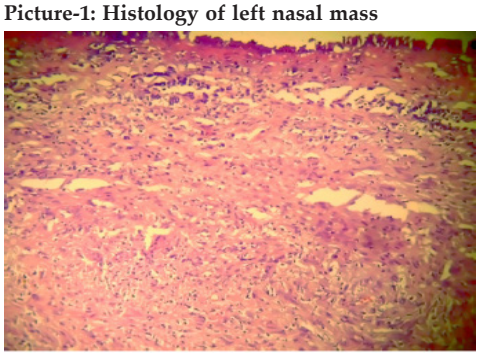


Image-4, 5 & 6: plain CT Paranasal sinuses



Picture-1: Histology of left nasal mass



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