



## Sphenoethmoidal hemangioma-A rare presentation

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### ABSTRACT

Hemangiomas do not develop as commonly in the sinonasal cavity, compared with other head and neck sites. The most common presenting symptom was epistaxis. Hemangiomas involving multiple sinuses with a atypical clinical presentation is extremely rare. We present a representative case of sphenoethmoidal hemangioma with atypical clinical presentation and treated by endoscopic excision yielding excellent outcome in terms of tumor control and safety.

### CASE REPORT

A 37 year old male had c/o referred to ENT OPD with c/o headache past 6months, diminished vision in right eye 2months & left eye 2weeks and increased frequency of urination 2weeks.



On carefully eliciting the history he revealed his headache was diffuse, compressive nature continuously present not associated with nausea and vomiting. 2 months back developed blurring of vision in right eye for which he attended ophthalmology OPD where he was admitted for 2 days investigated, diagnosed as ?retrobulbar neuritis treated and discharged.

After discharge, for 2 weeks he was asymptomatic and had deterioration of vision in right eye & diminution of vision in left eye with increased frequency of urination 2 weeks. patient again revisited ophthalmology OPD from where he was referred to neurology OPD.

After serial of investigations by neurologists they are still inconclusive in diagnosis and with aid of radiologists they gave a differential diagnosis of? Fungal granuloma, ? ethmoidal carcinoma and ?pituitary adenoma with diabetes insipidus.

Then patient was referred to our ENT OPD for further management.

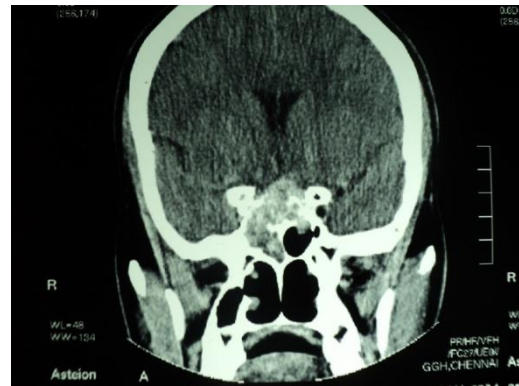
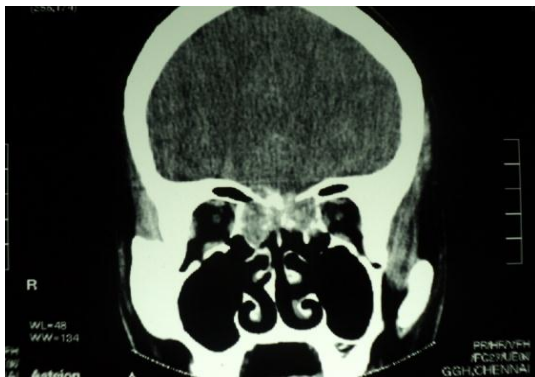
☉ CRANIAL NERVE EXAMINATION:

OPTIC NERVE:	Rt	Lt
Visual acuity	only light	6/36
	Perception	
Colour vision	not appreciable	+
Field of vision	absent	+

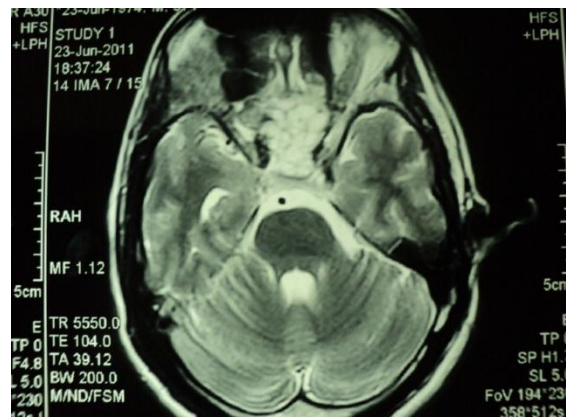
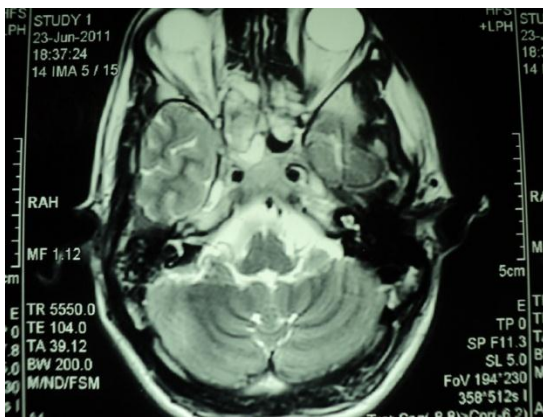
Other cranial N<sup>r</sup>'s examination-Normal; All blood investigations was normal

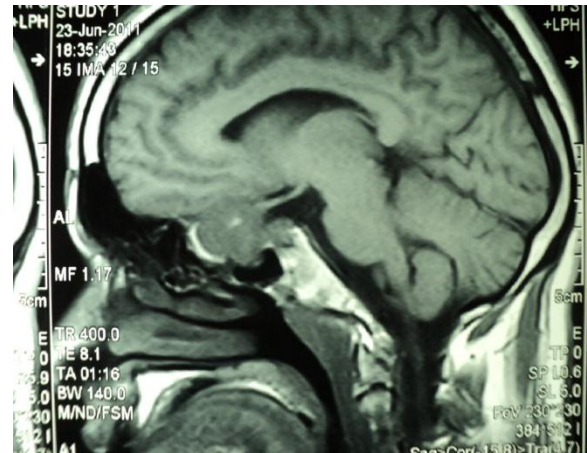
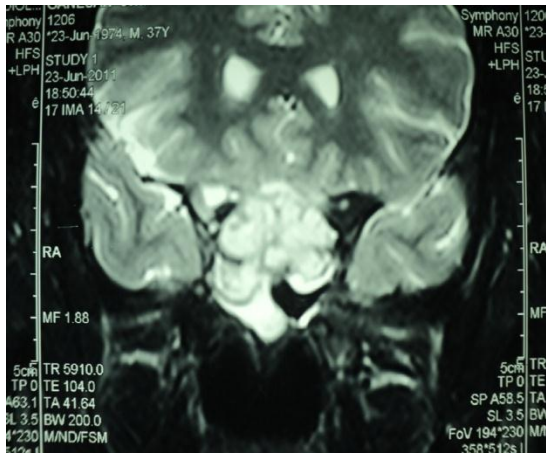
ENT examination revealed normal except for mild DSL, Deviated septum to left.

## CT PNS



## MRI BRAIN WITH PNS





DIAGNOSTIC NASAL ENDOSCOPY showed,

Rt side: Accessory ostium + , Middle turbinate medialized

\*Lt side-DSL, Accessory ostium + , Sphenoethmoidal recess-normal

# NO MASS VISUALISED IN NASAL CAVITY

⊙ We planned for a,

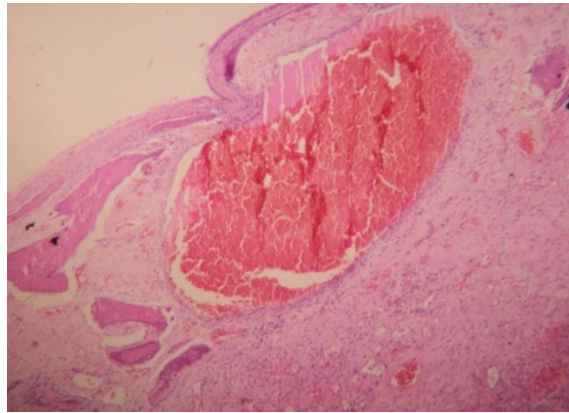
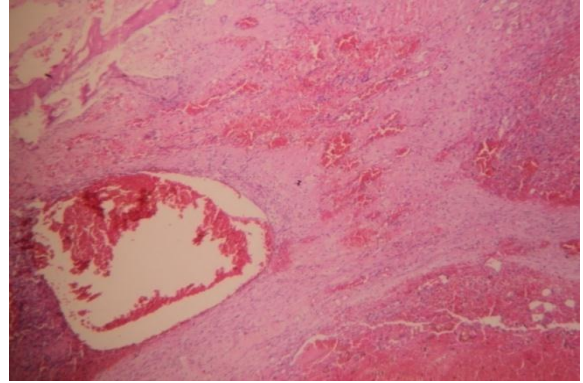
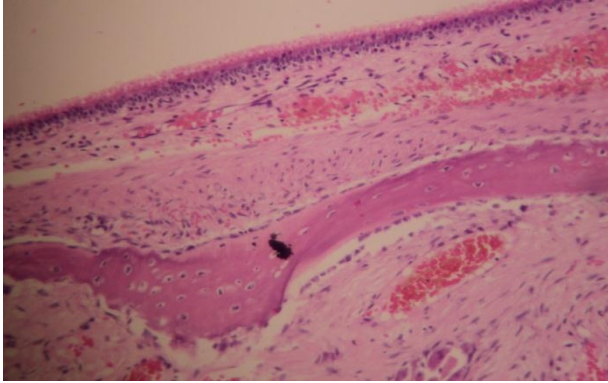
ENDOSCOPIC TRANSNASAL MASS EXCISION, under GA

⊙ We had excised the mass and sent for histopathological examination

⊙ HPE report showed polypoidal respiratory epithelium lined mucosa with scattered bony spicules with *large dilated thin walled blood vessels lined by endothelial cells* and foci of proliferating thin walled branching closely packed blood vessels with intervening fibrotic stroma.

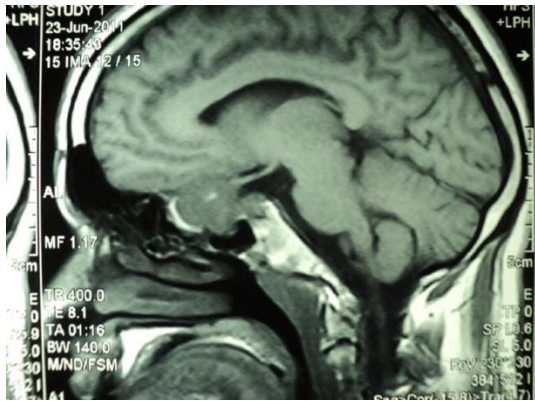
Lesion consistent with *HEMANGIOMA*

**HPE PICTURES-CAPILLARY AND CAVERNOUS HEMANGIOMA**

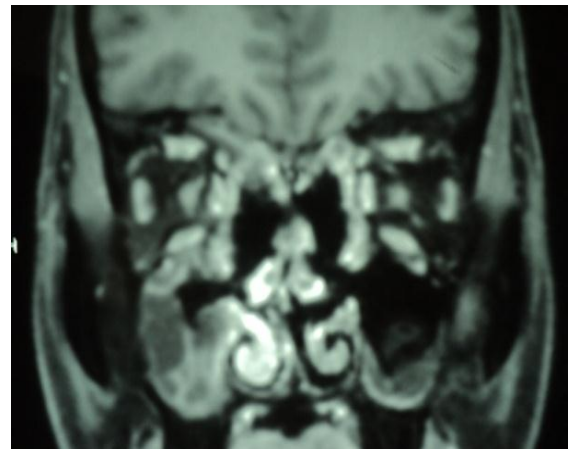
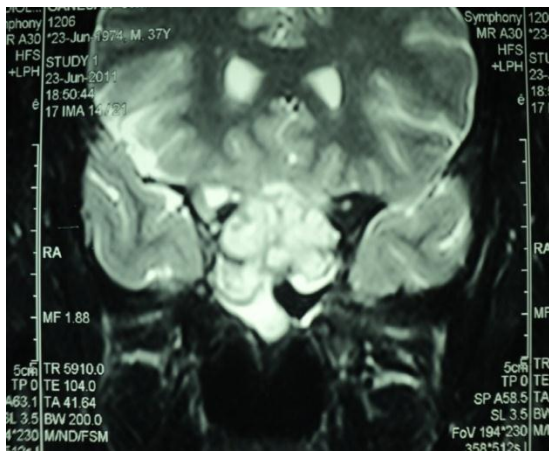
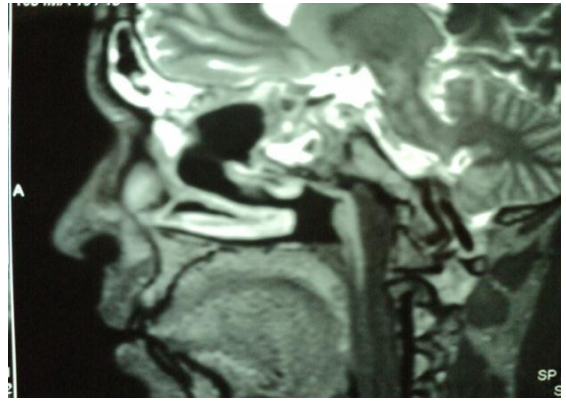




**PRE OPERATIVE MRI**



**POST OPERATIVE MRI**



Post operatively pt had a transient Diabetes Insipidus was on strict fluid management with normal renal parameters

Within a week *DI resolved completely*

Nasal pack removed on IVth POD

**To our surprise pt had a dramatic improvement in vision in immediate post op period and returned to 6/6 in both eyes.**

**CONCLUSION:**

**Thus we conclude sphenothmoidal hemangioma is extremely rare presenting with blindness and endoscopic optic nerve decompression proven its complete removal with excellent outcome in patient improvement and tumor control.**

## DISCUSSION

Hemangiomas are classified histologically as capillary, cavernous or mixed, according to the predominant vascular channels. The subtypes also vary in their clinical features. Capillary hemangiomas are more frequent than cavernous, present generally at a younger age and may spontaneously involute<sup>2</sup>. The lobular capillary hemangioma type is commonly misnamed pyogenic granuloma and is a quite common lesion that arise from the skin or mucous membrane, generally in the head and neck<sup>3</sup>. In contrast, cavernous hemangiomas typically present in adults, do not undergo spontaneous involution and are more likely to cause compression of surrounding structures<sup>3,5</sup>.

according to the predominant vascular channels within the tumor<sup>1</sup>. Most hemangiomas in the nose are small capillary lesions that arise from the nasal septum or vestibule. Only a few originate from the lateral wall of the nose, with a predominance of cavernous hemangioma, that tend to be larger and more aggressive<sup>2</sup>.

Cavernous hemangioma may present as an unilateral mass occupying the sinuses and the nose causing epistaxis, progressive nasal obstruction, recurrent sinusitis and very often proptosis and diplopia due to invasion of the orbit. Biopsies may be problematic because of lesion site and risk of uncontrollable bleeding<sup>3,4,5</sup>.

As far as paranasal sinus cavernous hemangiomas are concerned, we were able to find only 21 cases in the literature<sup>5,8,9,10,11,12,13,14,15,16,17,18,19</sup>; 2 of the middle turbinate<sup>8</sup>, 7 of the ethmoid sinus<sup>4,8,9,11,12,14</sup>, 6 of the maxillary sinus<sup>5,13,16,18,19</sup>, 3 of the sphenoid sinus<sup>2,17</sup>, 1 of the frontal sinus<sup>15</sup> and 2 involving two different sinuses<sup>10,14</sup>.

The clinical presentation of sinus cavernous hemangioma may be marked by epistaxis, but some cases, such as ours, may present only with headaches, diplopia are also common features. The age of diagnosis varies from 14 to 71 years old and no sex predominance has been noted<sup>10,12</sup>.

In surgery, due to the lack of large feeding vessels, capillary hemangiomas are easier to remove, as opposed to the potential bleeding problem expected in the surgery of a cavernous hemangioma.

Endoscopic sinus surgery is constantly pushing its boundaries, with the development of new techniques, technology and the gaining of experience by specialists. Still, large, highly vascular tumors represent a challenge, due to the limitation of the endoscope in providing a wide field vision and the constant danger of losing operability because of profuse bleeding.

We conclude that up to now case reports indicate that endoscopic sinus surgery is effective in complete removal of cavernous hemangiomas of the nose and sinuses.



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