



FRONTAL SINUS OSTEOMA –A CASE REPORT

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**ABSTRACT**

A 50 year old female presented with a history of headache for 2 years with tingling sensation of left half of the forehead. On examination of face there is no obvious swelling. CT scan shows well circumscribed mass of varying density suggestive of frontal osteoma. Histopathological examination revealed frontal osteoma. Managed by frontal sinus exploration with osteoplastic flap.

**KEYWORDS :**

**INTRODUCTION**

Osteoma is a benign osteogenic lesion characterized by proliferation of compact or cancellous bone. It can be central, peripheral or extraskeletal. Patients with osteomas should be evaluated for Gardner's Syndrome. The most common location of paranasal sinuses is Frontal sinus followed by Ethmoid, Maxillary and Sphenoid sinus. These are often observed in fifth and sixth decades with a male predominance.

**Case Report**

A 50 year old female patient presented with the chief complaints of Headache along the left half of forehead since 2 years which is insidious in onset & gradually progressive, shooting type, relieved with medication. with Tingling sensations along left half of the forehead



**On Presentation**

**On Examination of face**

On inspection appears to be symmetric without any obvious swelling.

On palpation tenderness elicited along the medial border of left eyebrow & left frontal region

**INVESTIGATIONS**

**X-RAY PNS**

A plain radiograph of skull in waters view showing a well circumscribed lobulated radiodense/ sclerotic lesion in the region of the left frontal sinus possibly from the bony wall of the sinus.

No periosteal reactions/ adjacent bone /soft tissue changes noted.



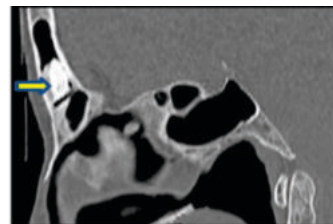
**CT PNS**



Axial view

coronal view 1

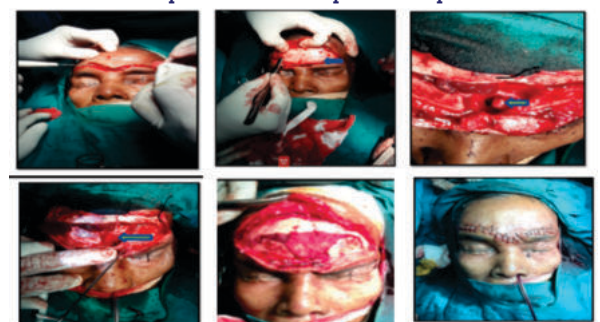
coronal view 2



Left frontal sinus is septated showing two well circumscribed masses of variable density, varying from very dense to less dense with ground glass appearance. Largest measuring 1.5cm obstructing the fronto ethmoidal recess area.

**Management**

**Frontal Sinus Exploration - Osteoplastic Flap Method**



1. A brow incision extending from left supraorbital area to the right
2. Frontal bone -anterior table exposed
3. Frontal osteoma identified in left frontal sinus
4. Tumour removed frontoethmoidal recess made patent
5. Osteoplastic flap repositioned
6. Skin is closed in layers using vicryl.



**DISCUSSION**

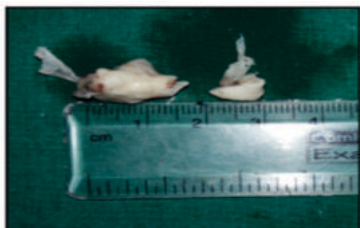
Osteomas of PNS are benign, slow growing bone tumors that can cause a variety of clinical features on their size and location. Most are asymptomatic and are discovered incidentally on imaging studies. Patient may present with periorbital pain, rhinorrhea, anosmia. In our case histopathology shows trabeculae of lamellar bone and woven bone with intervening areas of loose fibro fatty tissue with pseudo stratified columnar epithelium. A purely endoscopic or endonasal approach has high risk of incomplete excision. Even giant frontal osteomas can be safely removed by open surgery.

**CONCLUSION**

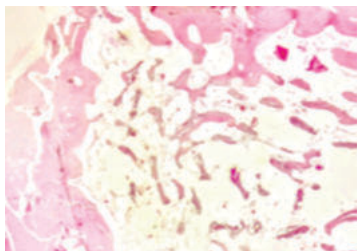
It can be stated that osteomas of frontal sinus are usually benign, innocuous lesions. However their size and prominent location on the visible parts of the face can necessitate surgical interventions that need careful decision making for successful results both functionally and aesthetically.

**REFERENCES**

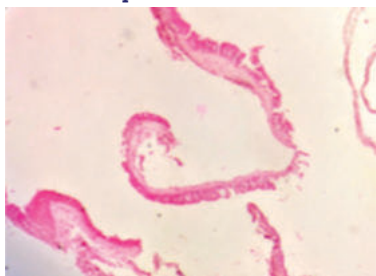
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**Specimen Excised And Sent For HPE.**



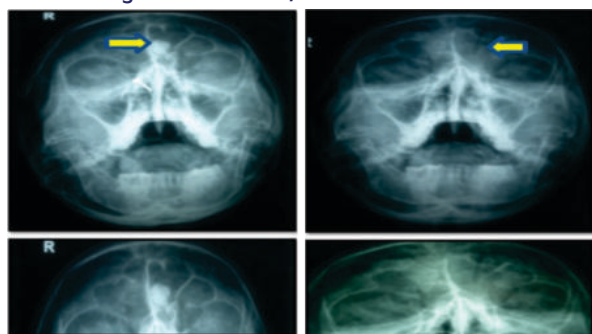
**Trabeculae of lamellar bone and woven bone intervening areas of loose fibrofatty tissue.**



**Pseudo stratified columnar epithelium.**

**Gross examination:** Received single bony tissue measuring 0.5x0.5x0.5 cm

**Clinical diagnosis: Osteoma, left frontal sinus**



**Pre op**

**Post op**