

**A DISTINCTIVE  
SINONASAL MASS:  
UNRAVELING THE DIAGNOSIS.**

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Resident , Department of Pathology**

A 48 year old female presented with :

- Intermittent nasal bleed since 1 month
- Bilateral nasal obstruction since 2 years.
- Intermittent headache since 2 years.
- History of recurrent lower respiratory tract infection since 2 years.

## Medical history:

- No symptoms of allergic rhinitis, blurring of vision , cheek numbness , smell disorder , ear or throat symptoms.
- No history of any drug allergy.
- No history of any chronic illness/ Diabetes/  
Hypertension.
- No significant family history of carcinoma.

- Past history: History of hospitalisation for similar complaint in July 2023 . No documentation available.
- The patient experienced the nasal obstruction again and nasal endoscopy was performed and the patient came to Dr. D.Y. Patil Hospital and Research centre, Pimpri for further management.

## Clinical examination:

- No external deformity or scars in nose.
- Paranasal sinuses : non tender.
- On anterior rhinoscopy: pinkish mass was noted in left nasal cavity, which bleeds on touch.
- Nasal mucosa was mildly congested.
- Oral cavity and ear appears to be normal.

PATIENT ID: 2023080049  
NAME: Mrs. REKHA DIPAK PATIL  
AGE: 49 Y  
SEX: F  
DATE: 10-Aug-2023

REF BY: SELF  
STUDY: nasal endoscopy  
EXAMINED BY: Dr. SHALINI SAXENA  
HOSPITAL ID: AB23440643



S/P SURGERY OF LEFT SIDED NASAL MASS OUTSIDE  
OUTSIDE HPE - ADENOID CYSTIC CARCINOMA



CRUST(+) IN LEFT NASAL CAVITY - REMOVED  
EDEMATOUS SMOOTH SWEELING IN LEFT MIDDLE MEATUS



MUCOPUS IN THE NASOPHARYNX

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Revision 3/Med/Form 70a



Medical in Confidence



**Axial view**

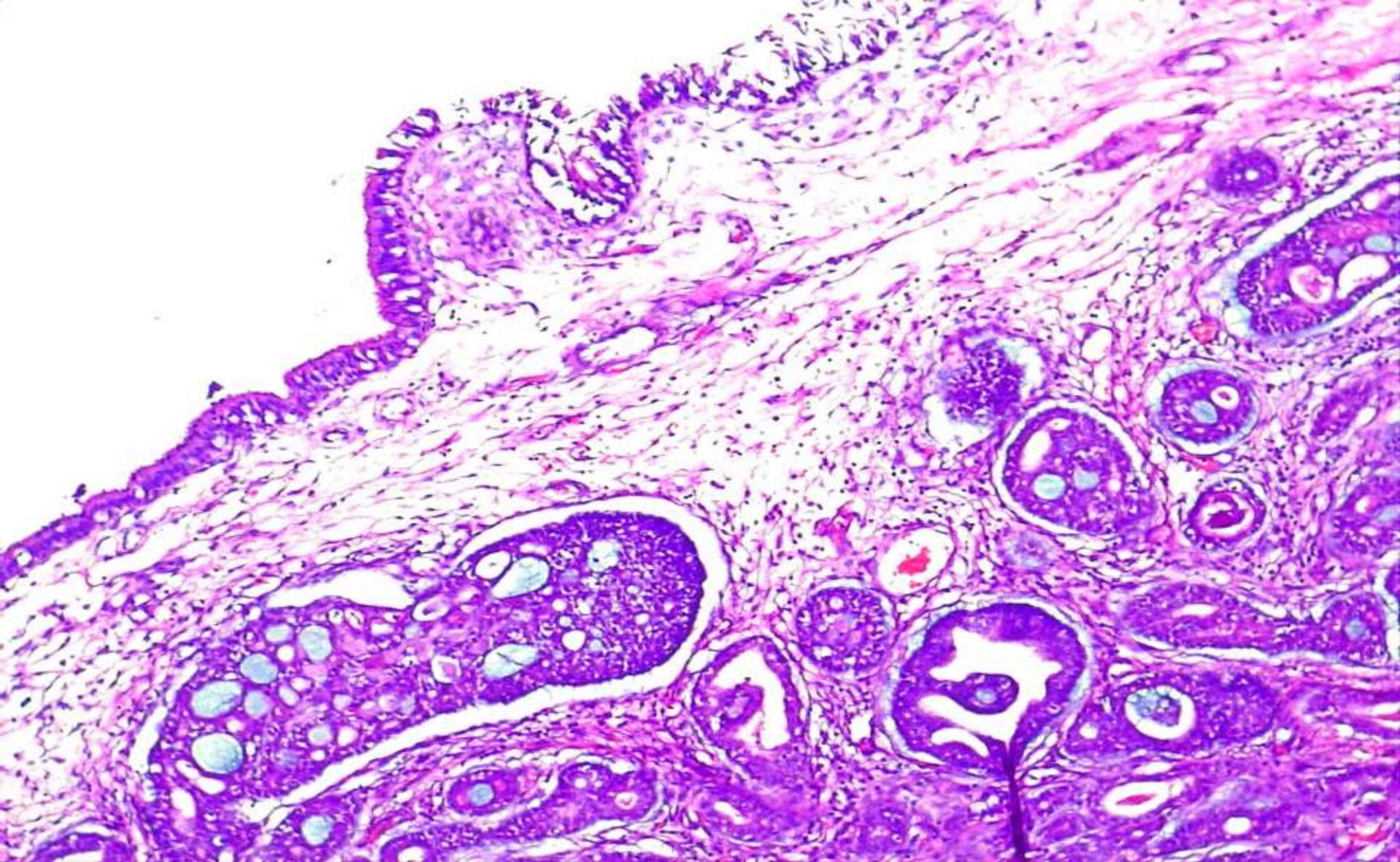


**Saggittal view**

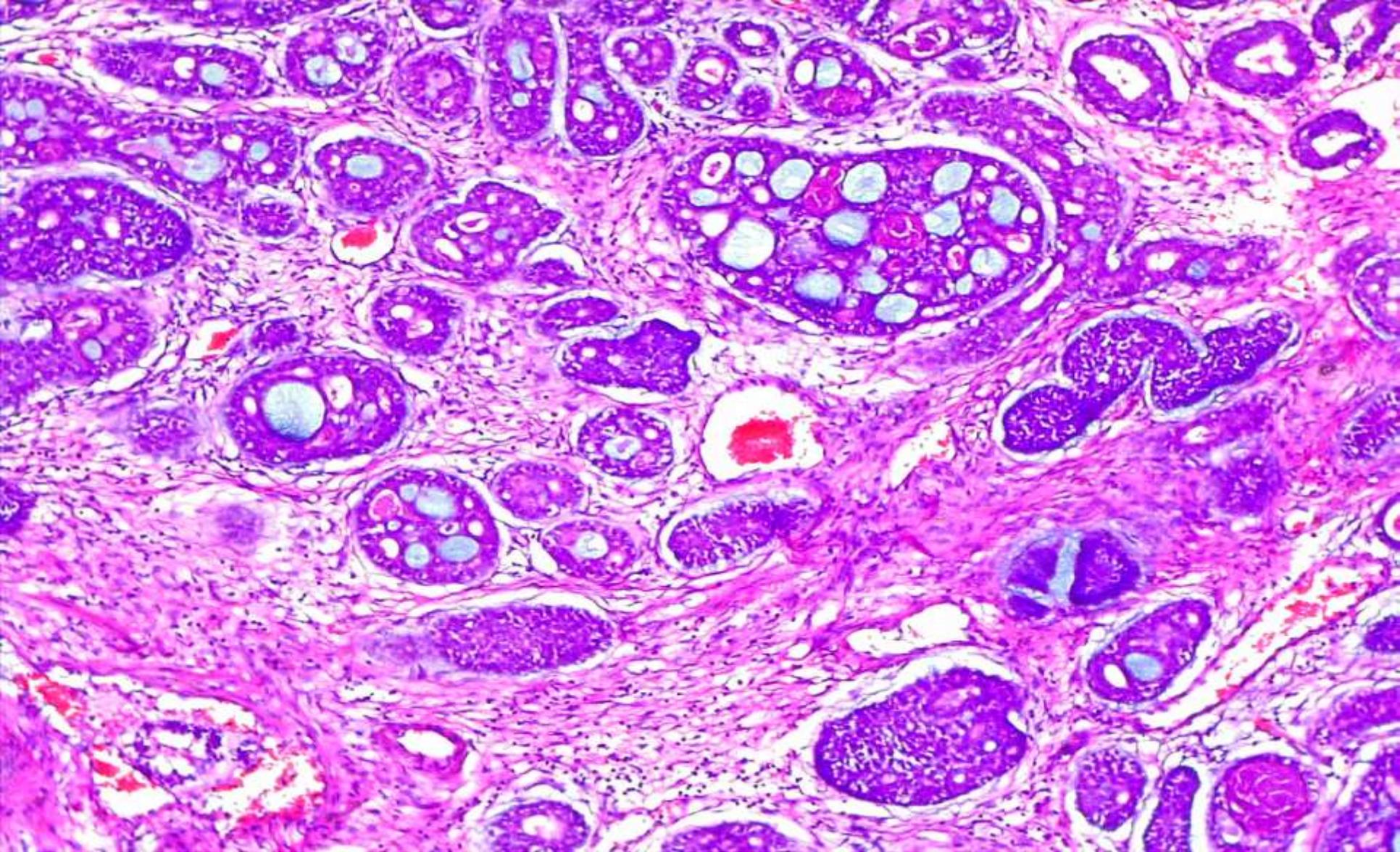
**CT- Paranasal Sinus:** Heterogenous soft tissue density polypoidal mucosal thickening is seen in the posterior aspect of left nasal cavity, extending and involving bilateral sphenoid sinuses, bilateral posterior ethmoid air cells and left maxillary sinus.

- CT-PNS findings were suggestive of sinonasal polyposis with changes of sinusitis.
- **Management**: The patient underwent endoscopic guided complete exenteration of sinonasal mass.
- The excised sinonasal mass was sent for histopathological examination.

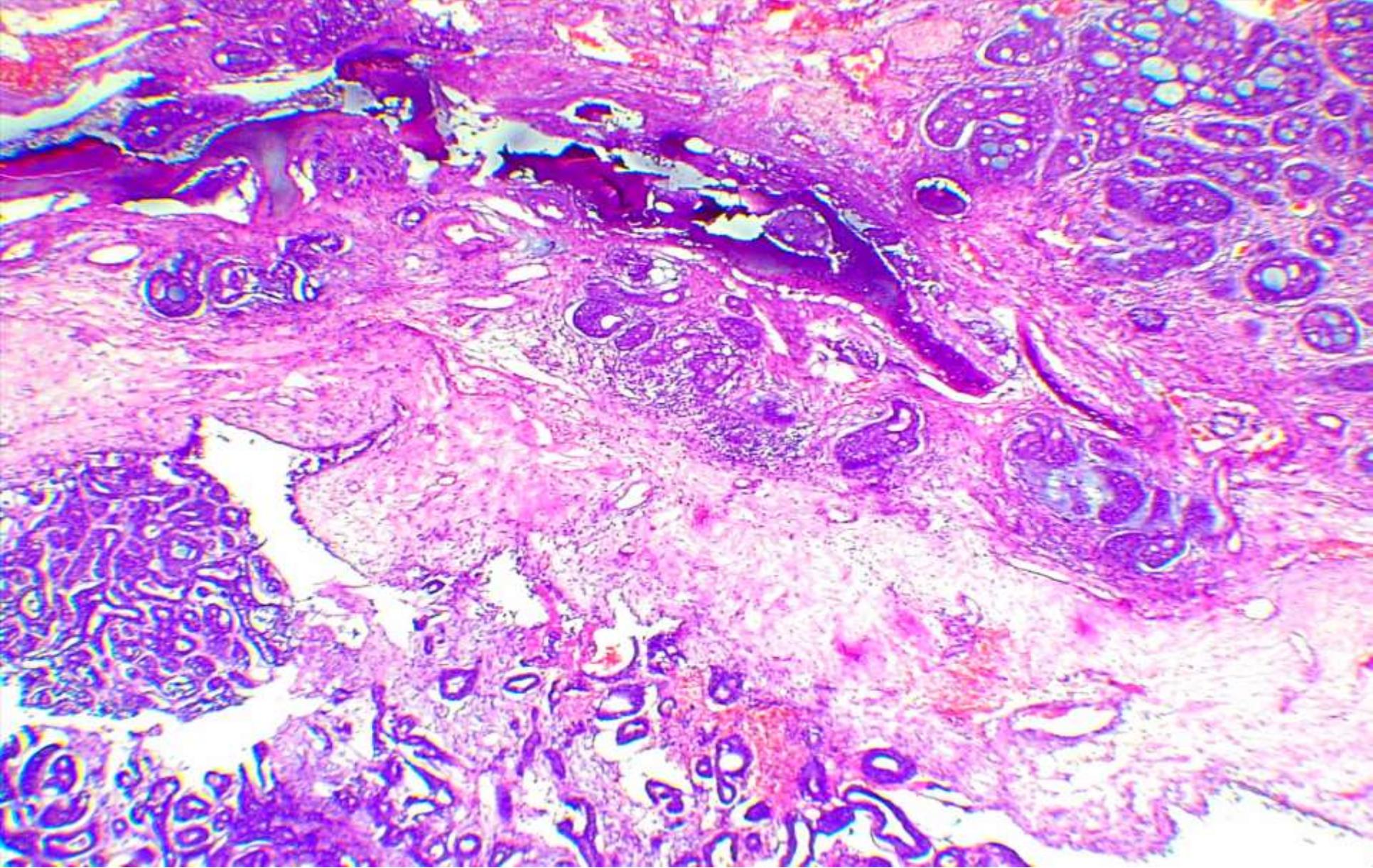
- **Gross examination** : We received multiple grey white soft to firm tissue pieces along with bony piece, altogether measuring 3x2.5x0.8 cm.
- Specimen totally submitted for microscopy.



Tumour along with the pseudostratified columnar epithelium



Tumour cells are arranged in cribriform and acinar pattern. The tumour shows neoplastic cells having clear to eosinophilic cytoplasm with some of the cells having hyperchromatic angulated nuclei .



Tumour invading the nasal bone.  
No perineural invasion is seen

- **Microscopy:**

**These findings confirms the diagnosis of adenoid  
cystic carcinoma of sinonasal mass.**

## **Discussion:**

- Adenoid Cystic Carcinoma (ACC) is a rare tumour, contributing less than 1% of head and neck malignancies.
- It involves salivary gland, nose and paranasal sinus.
- It is more prevalent in females than males.
- Sinonasal malignancies constitutes 1-2 % of all malignancies.
- Out of all sinonasal malignancies, sinonasal adenoid cystic carcinoma is the third most common.

- ACC is a slow growing tumour and distant metastasis occurs at late stages.
- However, due to its tissue infiltration and perineural invasion, it has high recurrence rates even after surgical excision.
- The most affected site is maxillary sinus followed by nasal cavity.
- It usually gets misdiagnosed as sinusitis or allergic rhinitis due to delay in presentation and diagnosis.

- The tumour invades into surrounding bone and adjacent structures such as orbit, pterygo-maxillary fossa, meninges and base of the cranium which can lead to serious symptoms causing ophthalmoplegia, otalgia, proptosis, headache and seizures.
- CT scan and MRI is required to diagnose ACC.
- CT scan is required for surgical procedure and MRI detects perineural invasion.

- Histological types of SNACC:

1. Tubular type: grade-I

2. Cribriform type - grade-II.

3. Solid type-grade-III

- Most common type : Cribriform

- Least common type: Solid.

- Prognosis: Best with **tubular** type, worst with solid type.

- All subtypes have a tendency for perineural invasion.

- The prognosis of SNACC entirely depends on the histological subtype of tumour and available treatment options.
- The surgical approach for sinonasal ACC can either be open, endoscopic or combined .
- Usually, chemoradiation is started 4–6 weeks after surgery.
- Follow up**: The patient has been advised for radiation therapy .

# REFERENCES

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**THANKYOU**