



BENIGN AND MALIGNANT TUMOURS OF NOSE AND PARANASAL SINUSES A CASE SERIES

ENT

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ABSTRACT

Background- A variety of neoplastic and non neoplastic conditions involving the nasal cavity, Paranasal sinuses and nasopharynx. It is mandatory for ENT surgeons to take detailed history and thorough examination before reaching final diagnosis. Tumours of nose and paranasal are rare entities. **Methods-** This is a case study of 11 patients with c/o nasal obstruction, bleeding with sinonasal mass. Treated in Government medical college from period of January 2022 to March 2022. Purpose of this study to evaluation of sinonasal masses by proper history taking and physical examination followed by diagnostic nasal endoscopy and radiological investigations like X RAY and CECT PNS and MRI. confirmation of diagnosis by biopsy taken from the sinonasal mass and histopathological examination. Treatment by combination of surgery, radiotherapy, chemotherapy depends on the type of tumour and its extension. **Results-** Total 11 patients were analysed, 6 benign and 5 malignant, Majority of patients were in age group 20-60 years. MC gender are male. **Conclusion-** sinonasal masses have various different diagnosis, common in male, peak during 2nd -6th decade.

KEYWORDS

INTRODUCTION:

Sinonasal malignancy are less common with an estimated incidence of 0.5%-1/100000. [1] It is common in males and common in age between 20-60 years. Sinonasal malignancies are account for around 1% of all malignancies and 3-5% of all head and neck cancer. [2]

Examples of benign and malignant tumours of sinonasal mass are:- [3]
Benign:-inverted papilloma, oncocytic papilloma, hamartoma, salivary gland adenoma, leiomyoma, angiofibroma, ameloblastoma, odontogenic and non odontogenic tumours etc.

Malignant:-squamous cell carcinoma, sinonasal undifferentiated carcinoma (SNUC), Adenocarcinoma, salivary gland carcinoma, esthesioneuroblastoma.

Primary epithelial tumours are the most common type of sinonasal malignant tumour, with squamous cell carcinoma the most common subtype followed by adenoid cystic carcinoma and adenocarcinoma. Of the less common non-epithelial tumours, lymphoma is the most commonly reported tumour. [4]

Mc type of sinonasal malignancy is Squamous cell carcinoma.

Case 1-

A 45 year male, complaints of swelling over left side of cheek since 1 yr, left sided nasal obstruction since 6 month.

Examination- Dorsum of nose shifted to right side. A pale glistening polypoidal mass seen in left nasal cavity, doesn't bleed on touch. Swelling present over left side of cheek (4*4cm)

Investigation- CECT PNS showing, heterogeneously enhancing soft tissue density lesion centered in left maxillary antrum, extending in nasal cavity. Intraorbital extension in left orbit, cheek, retromolar trigone, bony destruction seen.

Histopathology- poorly differentiated non keratinizing squamous cell carcinoma.

Treatment- left total maxillectomy done by weber ferguson incision.

Case 2-

A 3 year male, complaints of nasal obstruction left side since 2 yrs. Epistaxis since 6 months.

Examination- A swelling present over left dorsum of nose, discharge seen. Reddish mass seen in bilateral nasal cavity.

Investigation- CECT PNS showing, an ill defined heterogenous

enhancing mass of size approx. 6.7*4.1*4.2 cm, causing expansion of both nasal cavity, orbit and bony destruction. Pushing left eye ball outwards.

Histopathology- Squamous cell carcinoma.

Treatment- FESS with ophthalmology consultation.



Case 3-

A 55yr male complaints of bleeding from nose since 2 yrs and right nasal obstruction since 1.5 yrs.

Examination- A greyish red mass seen in right nasal cavity, bleeds on touch.

Investigations- CECT PNS showing, an ill defined polypoidal mass (4.9*5.3*4.3) in right nasal cavity with extension upto cribriform plate and remodeling ethmoidal air cells, obstructing osteomeatal complex.

Histopathology- undifferentiated sinonasal carcinoma.

Treatment- FESS with neurosurgical and ophthalmology opinion.

Case 4-

A 22 yr male complaints of nasal obstruction since 2 yrs, bleeding and swelling left side of nose since 1 yr.

Examination- bilateral nasal mass seen, bleeds on touch.

Investigations- CECT PNS showing, soft tissue density in all sinuses causing bony erosion with intraorbital and intracranial extension. Bilateral lamina papyracea, posterior wall of antrum, frontal sinus and floor of sphenoid eroded.

FNAC- left sided neck node shows, metastatic deposit of malignant Round cell tumor/ carcinoma.(?nasopharyngeal carcinoma/?upper respiratory tract sinonasal carcinoma)

Histopathology- vascular, secondarily infected ,necrotizing polypoidal lesion with single foci showing feature of round cell tumor.

Treatment- excision via transpalatal approach and endoscopic approach. Neurosurgery and ophthalmology consultation.

Case 5-

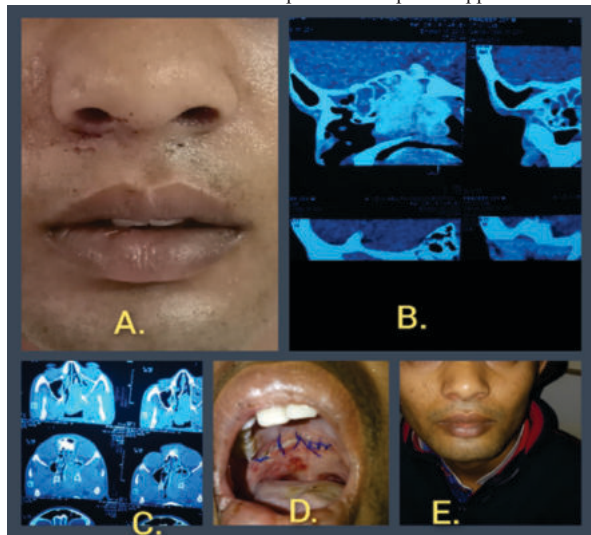
A 20 yr male presents with bleeding from nose since 6 month and right nasal obstruction since 3 month.

Examination- anterior rhinoscopy – bilateral nasal cavity clear, posterior rhinoscopy – a reddish grey mass seen in choana (right side).

Investigation- CECT PNS showing, a soft tissue density lesion in right nasal cavity and nasopharynx. Extending to right pterygomaxillary fissure, sphenopalatine foramen, sphenoid sinus causing bony destruction and minimal intracranial protrusion in Prepontine region s/o neoplastic etiology.(nasopharyngeal angiofibroma)

Histopathology- Nasal Angiofibroma with evidence of infection.

Treatment- excision via endoscopic and transpalatal approach.



Case 6-

A 40 yr male c/o swelling over rt. Cheek since 2 yr & swelling over rt alveolar region since 4 yr.

Examination- Anterior nasopharyngoscopy – NAD, Oral cavity- a hard swelling of approx. size 4*4cm present over upper rt alveolar region.

Investigation- Routine blood investigation, Xray PNS, CECT PNS, FNAC

Management- excision via cald well luc approach HPE s/o- Pleomorphic adenoma.

Case 7-

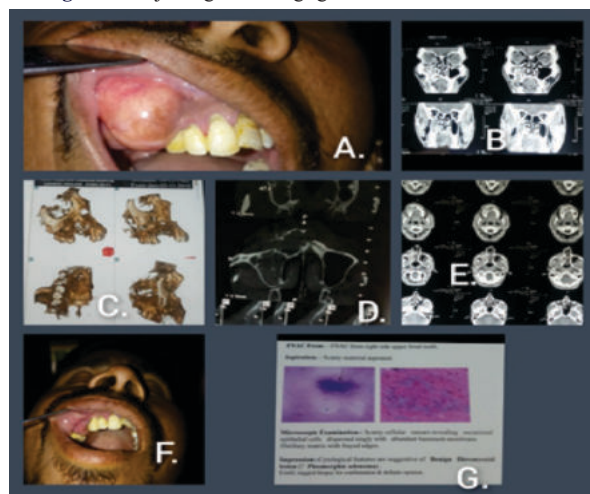
A 71 yr female presents with b/l nasal obstruction since 1 yr(R>L)

Examination- A reddish to bluish mass seen in b/l nasal cavity,soft in consistency,doesn't bleed on touch.

Investigations- Routine blood test

CECT PNS – A mildly enhanced polypoidal lesion seen in b/l nasal cavity extending to nasopharynx seen rt cheek. Mucosal thickening of maxillary & ethmoid sinus seen, possibly capillary hemangioma.

Management- Injecting sclerosing agent to lesion site.



Case 8-

A 17 yr male c/o swelling over lt side of cheek since 1 yr.

Examination- B/L nasal cavity clear, swelling present over lt maxillary region.

Investigation- Routine blood test, Xray PNS, CECT PNS- a cystic lesion of size 4*4*3 cm over lt maxillary sinus and body of maxilla.

Impression- cystic mass in lt maxilla in close proximity to the dental roots?AMELOBLASTOMA/ODONTOGENIC KERATOCYST.

Management- excision via cald well luc approach.

Case 9-

A 32 yr male c/o b/l nasal mass obstruction since 6 month & bleeding from b/l nasal cavity since 6 month.

Examination- Reddish mass present over b/l nasal cavity,bleeds on touch.

Investigations- Routine blood test, CECT PNS.

Management- Excision via endoscopic approach. HPE s/o – angiomatous growth ? inverted papilloma.

Case 10-

A 38 yr female c/o pain & swelling over rt nose since 10 yr, nasal bleed since 6 month.

Examination- Swelling present over rt sided dorsum of nose & cheek. Nasal mass reddish in color over rt nasal cavity & bleeds on touch.

Investigation- Routine blood test, Xray PNS, CECT PNS- ill defined heterogenous soft tissue density seen in rt maxillary sinus causing bony erosion extending to cheek.

Management- Maxillectomy via lateral rhinotomy approach. HPE s/o-ADENOID CYSTIC CARCINOMA OF MAXILLARY SINUS.

Case 11

A 40y/m C/o discharge from left nasal cavity x 8-9 months. History of mouth breathing, snoring, facial pain, headache.

On examination –

Nose -Right DNS,Discharge in left nasal cavity,A pale polypoidal mass present in left nasal cavity posteriorly. Mouth and throat – Bulging of soft palate seen

Investigations-

Routine blood investigations normal

CECT PNS – ILL defined heterogenous enhancing soft tissue mass in left maxillary sinus causing bony obstruction of the walls of maxillary sinus, causing bony destruction of surrounding bones (neoplastic mass of left maxillary sinus)

HPE- diffuse arranged cells showing pseudofollicles, small to intermediate cells showing cleaved nuclei and inconspicuous nucleoli scant amount of few mitosis are seen with prominent vasculature

Impression- **MALIGNANT ROUND CELL TUMOR**

Treatment- Excision of mass via oral and nasal route.

CONCLUSION-

*Benign and malignant tumour of nasal cavity & paranasal sinuses are common in age group 20-60 yr.

*Common in male gender.

*Most common presentation are nasal obstruction & bleeding.

*Early diagnosis and management of tumour prevents intraorbital & intracranial complications.

*Clinical diagnosis is difficult & have to be on histopathological examination by taking biopsy from nasal mass & CECT PNS to see the extension of the lesion.

Systematic reviews and large case series now support the endoscopic approach as a favourable treatment option for the management of benign tumours, including most cases of sinonasal inverted papilloma, [5-8] juvenile nasal angiofibroma [9-11] and osseous tumours .

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