ADENOID CYSTIC CARCINOMA OF NASAL CAVITY - A CASE REPORT

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INTRODUCTION
Adenoid Cystic Carcinomas are common in minor salivary glands about the mouth, uncommon in parotids and rare in Nose and para nasal Sinuses. Histologically they are composed of small deeply basophilic nuclei with characteristic gland like structures. Adenoid Cystic Carcinoma of Nose and para nasal Sinuses has a unique natural history. They most commonly present with mass or epistaxis. Even though slow growing, they have a propensity for frequent local recurrence and early perineural and haematogenous spread. Lungs are the most common site for metastasis. Lung metastasis are usually multiple and prolonged survival with multiple metastasis is not unusual.

CASE REPORT
A 38 year old male patient, a sawmill worker came to the outpatient department of E.N.T. Guntur General Hospital, Guntur, with a swelling over left side of nose (Fig.1) started one year before and gradually increasing in size. The associated symptoms were pain which was dull aching in nature over left side of nose since 4 years, intermittent burning sensation since 4 years, block in left nostril since 2 years, watering of the left eye since 1 year, occasional bleeding from left nostril since 15 days. There was no history of difficulty in opening the mouth or loss of teeth. A diffuse swelling over left side of Nose extending superiorly below the inferiomedial aspect of left eye, inferiorty up to the level of lower lateral cartilage, medially from dorsum and over left nasal bone to left maxillary area laterally obliterating nasomaxillary groove. Approximately 5 cm x 3 cm in size. No engorged veins, no visible pulsations, skin over the swelling was normal. On palpation swelling was tender, surface was irregular, margins were indistinct merging imperceptably into the surrounding structures, stony hard in consistency. On Anterior Rhinoscopy a pinkish, lobulated mass seen obliterating the left nasal cavity abutting on to the septum. On probe test, the mass was found to be attached to the lateral-wall of the left nasal cavity but the left nasal vestibule was free all around. The mass did not bleed on touch, but it was painful to touch. Gingivolabial sulcus was not obliterated. No abnormality was detected in throat examination. Cervical lymphnodes were not enlarged or palpable on both sides. No restriction of eye movements and vision was normal. Systemic examination did not reveal any abnormality.

Fig 1 Pre operative clinical photograph of the patient showing swelling obliterating left nasofacial groove.
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INVESTIGATIONS

Complete blood picture was normal. Plain X-Ray of the nose and para nasal sinuses showed homogeneous opacity of the left nasal cavity and haziness in left maxillary sinus. X-Ray chest and Ultrasound abdomen were normal. CT scan was done to know the extension of the tumor. A moderately large enhancing soft tissue mass in left nasal cavity was present and there was erosion of anterior portion of medial wall of left maxillary sinus (Fig.II). There was opacification of left frontal sinus, anterior Ethmoidal cells and nasolacrimal duct. Sphenoids, Right Maxillary, frontal, ethmoidal sinuses were normal. There was no evidence of intracranial extension.

Biopsy was taken from the mass under local anaesthesia and on Histopathological examination it was found to be an Adenoid Cystic Carcinoma of cribriform pattern (Fig.III). Small deeply basophilic cells with scanty cytoplasm that form characteristic gland like structures. The nuclei are larger and hyperchromatic. Vesicular cystic dilatations of their glands are seen, filled with secretions. The glands are arranged in small groups separated by the fibrous connective tissue giving a Lobular appearance.

Treatment

According to the latest AJCC TNM staging (Maxillary sinus, In : American Joint Committee : AJCC Cancer Staging manual. Philadelphia, pa : Lippincott – Raven publishers, 5th Ed., 1997, pp-47-52)¹. This case came under clinical stage III that is T₃N₀M₀. So surgery and postoperative high dose Radiotherapy was planned for this case. The patient was operated under General Anaesthesia. A lateral rhinotomy incision was made on the left side. Extended Medial Maxillectomy was done. Tumor mass removed with widest possible margin of adjacent tissue. Ethmoids were removed on left side. A part of inferiomedial aspect of orbital bone was removed on left side. We facilitated drainage for all sinuses on left side, which is a prerequisite for, post-operative Radiotherapy. The excised specimen was sent for Histopathological examination, report was consistence as Adenoid Cystic Carcinoma of Cribriform Pattern. Post-operative period was uneventful. High dose conventional radiotherapy at a dose of more than 7000 CGY was given after surgery. Fistula formation occurred two months after completion of high dose radiotherapy and was repaired successfully by Prefabricated Forehead Flap with Split Skin graft by Plastic Surgeon (Fig.IV). Subsequently the case was followed for six months, which revealed no local recurrence or distant metastasis.

DISCUSSION

Adenoid Cystic carcinomas are poorly encapsulated,