A rare histopathology report of carcinoma of paranasal sinus and nasal cavity

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Abstract

Patient was reported in department of radiotherapy with complaint of nasal obstruction headache and vomiting. As this patient was referred from department of neurosurgery as an inoperable case, clinically they made differential diagnosis of neuroendocrine tumor & meningioma. After thorough discussion with neurosurgeon subject’s parents did not give consent for surgical biopsy due to post surgical disability of the patient and economic status further was subjected to radiotherapy where he tolerated & responded well.

Patient aged 6 yr male at day 1 of radiotherapy

Transverse and sagittal section of contrast enhance CT scan of patient showing large nasal cavity and left maxillary antrum mass with extension to left eye ball and adjacent organ.

Transverse section of head showing nasal cavity mass with extension to frontal lobe of brain

Transverse section of head and PNS with contrast showing large nasal cavity mass with extension to left eye ball, frontal lobe of brain and adjacent organ.

Figure 1 Figure 2 Figure 3
Patient after one month of radiotherapy

**Discussion:** Malignant tumor from paranasal sinus and nasal cavity are a diverse group. 50% of sinonasal tumors arise from maxillary sinus, 25% from ethmoid and 25% from nasal cavity. Squamous cell carcinoma accounts for 50% of these cancers and remaining includes adenocarcinoma, adenoid cystic carcinoma, melanoma, olfactory neuroblastoma, and undifferentiated carcinoma.

**Clinical features:** Presentation can be infection and inflammation followed by epistaxis and nasal obstruction. With the advancement of disease patient shows eye signs like proptysis of eye, headache, vomiting and oro-antral fistula.

**Evaluation:** Evaluation includes history and examination of sino-nasal system, eye signs, cranial nerve I – VI, endoscopy and biopsy. CT scan is useful in local staging and extension of disease.

**Management:** Treatment approach is usually a combination of total surgical excision followed by post operative radiotherapy. The surgical approach varies with the location and extent of tumor. Patient with loco-regional disease can be fully treated with radical radiotherapy.

**Prognosis:** With this approach of treatment, reported 5 year survival rates are around 40 – 50%.