



Esthesioneuroblastoma (ENB) with post radiation necrosis left maxilla, surgical plan on total maxillectomy with anterolateral thigh (ALT) flap: Case report

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Abstract

Esthesioneuroblastoma (ENB) is a rare malignant neoplasm arising from the olfactory neuroepithelium. ENB constitutes only 3% of all malignant intranasal neoplasm. Because of the rarity, the number of patients of ENB treated in individual departments is small. Most of these patients presents in locally advanced stages and require multimodality treatment in form of surgery, chemotherapy and radiotherapy. Multimodality approach with a risk-adapted strategy is required to achieve good control rates while minimizing treatment related toxicity.

Keywords: esthesioneuroblastoma, total maxillectomy, olfactory neuroepithelium

Introduction

Esthesioneuroblastoma also called “olfactory neuroblastoma” is a rare cancer of the nasal cavity. Arising from the upper nasal tract, Esthesioneuroblastomas is believed to originate from sensory Neuro epithelial cells also known as Neuroectodermal olfactory cells. Olfactory neuroblastoma is a tumour of neural crest origin arising from the olfactory neuro epithelium of the roof of the nasal cavity and paranasal sinuses. It is first described by Berger and Luc in the French medical literature. Less than 1000 cases have been described in literature since 1924. Olfactory neuroblastoma represents 5-10% of Sino-nasal tumours and less than 1% of all malignant tumours and has no sex predilection. It has bimodal age distribution occurring most commonly in teenagers and in sixth decade of life.

Case Description

A 23 yrs old men presented with the complaints of left side maxillary region which has ALT flap with discharge and foul smelling. Patient past history of the radiotherapist wrong site place marked and expose the radiation under the maxillary region. So i take the case is my care report. The doctors are diagnosed with Esthesioneuroblastoma with post radiation necrosis in left maxilla, s/p total Maxillectomy with ALT flap done. Patient has been admitted for conservative management and hospitalised for past 25 days. Patient is started past 1 yrs wound present and doctors are assess Ophthalmologist, ENT, Integumentary and Ortho thoroughly. Finally assess hearing impairment in Left Ear dysfunction and visual impairment in left eye enucleating. Mouth opening is restricted and drooling of saliva is present.

Sign and Symptoms

Most common symptoms of olfactory neuroblastoma are nasal obstruction, recurrent epistaxis and headache. Patients with

extensively advance tumours may have orbital symptoms because of pressure effect such as proptosis, diplopia, epiphora and nasal discharge. The most of the cases reported in Europe and America presented with nasal polypoidal mass causing nasal obstruction and bilateral proptosis.

Investigation

High resolution Computed tomography scan and magnetic resonance imaging can be used as supportive investigations to accurately delineate the extent of the tumor into surrounding structures such as cribriform plate, fovea ethmoidalis, anterior cranial fossa and retromaxillary space. Confusion may arise when trying to differentiate obstruction of sinus ostia draining leading to accumulation of nasal secretion from tumor tissue. The investigation like Hemoglobin-9.5, HCV-Negative, HIV-Negative, HBsAg- Negative, TLC-13300, Platlet-3.93, Urea-13, Creatine-0.4, RBS-137.

Discussion

Olfactory neuroblastoma also called as Esthesioneuroblastoma is a relatively uncommon intranasal tumour that originates from the olfactory epithelium of the upper nasal cavity in the region of cribriform plate. Esthesioneuroblastoma is an uncommon tumour and there no specific age, sex, or radical predilection. There are no known etiological factors. The tumour poses diagnostic difficulties for both the clinician as well as the pathologist. The MRI- Brain impression findings are visualized posterior aspect of the body and ramus hemi mandible shows bony destruction. Similar changes noted in lesser and greater wing of left sphenoid bone, mastoid segments of the temporal bone, left pterygoid bone and remnant left ethmoid and zygomatic arch – above features possible due to post radiation. Gliotic changes in left temporal lobe extending to posterior limb of internal capsule and external capsule – probable due to post radiation.



Fig 1.

Conclusion

Complaints of treatment Esthesioneuroblastoma for limited to the nasal cavity without evidence of cribriform plate erosion. The role of chemotherapy post-surgery is potentially harmful to disease-free survival and overall survival and thus should be discouraged until further research is conducted to ascertain the degree of benefit and harm to patients. Esthesioneuroblastoma medical treatment radiation and also extra cranial is 60% recurrence, but cranial-facial resection is 12%. So cranial- facial resection has been recurrence rate is low. But wrong site of radiation therapy entire patient life is spoiled. Radiotherapy in wrong place cost the patient life.

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6. Five patients were treated with radiation and extra cranial excision, and eighth patients were treated by cranial - facial resection only.