Abstract: Majority of nasal cavity and paranasal Sinus malignancies are squamous cell carcinoma. Other type of malignancies are adenocarcinoma, malignant melanoma, olfactory neuroblastoma, haemangiopericytoma lymphoma. We report a rare case of olfactory neuroblastoma in a 37 year old male who presented with nasal obstruction for 5 months.

Keyword: Olfactory neuroblastomaEsthesioneuroblastoma, Nasal cavity, Paranasal sinus.

Introduction
Olfactory neuroblastoma is a neuroendocrine malignancy of neural crest origin that arises from olfactory epithelium of olfactory rim of superior part of nasal cavity. Only Minimal number of cases have been reported in the literature in our country.

Case History
37 years Mr. Vadivel from Pudhukkottai presented to the ENT OPD with left side nasal obstruction for 5 months, left side facial pain for 2 months, History of nasal bleeding occasionally. He is not an alcoholic or chronic smoker.

Anterior rhinoscopic examination reveals a pinkish mass involving left side nasal cavity. Nasolabial fold is found obliterated. The mass bleeds on touch. Right side nasal cavity is normal.

Systemic examination detected no abnormality.
X-ray para nasal sinus shows opacity in the left side nasal cavity and left maxillary sinus.

The haematological, biochemical and urine examination were with in normal limits. CT scan paranasal sinuses shows soft tissue shadow seen in left side nasal cavity & left maxillary antrum. No orbital or intracranial extension is found.

Diagnostic nasal endoscopy done & biopsy was taken. HPE report shows olfactory neuroblastoma. This tumor is characterized by small round cells slightly larger than lymphocytes growing in a lobular or diffuse pattern. The tumour cells are having hyperchromic nuclei with uniform chromatin distribution. Their cytoplasm is sparse, whereas the stroma is highly vascular and often shows a neurofibrillary appearance.

The patient has been treated with endoscopy assisted wide excision of mass with post operative radiotherapy. Now the patient is on regular follow up.

DISCUSSION
Olfactory neuroblastoma is otherwise known as Esthesioneuroblastoma. This tumour arises from olfactory membrane in upper nasal cavity at cribriform plate. It affects males and females with equal frequency. And it occurs at any age group[1]. Aetiology is unknown. Based on morphology, it is two types
1. Smaller Esthesioneuroblastoma—which is characterised by Unilateral nasal mass centered on superior nasal cavity.
2. Large Esthesioneuroblastoma— which is characterised by Tumour extension in to anterior cranial fossa, ipsilateral ethmoid and maxillary sinuses. Orbital involvement occurs late.

Clinical Symptoms:
- Nasal obstruction (70%), epistaxis (46%), nasal discharge, unilateral nasal poly and anosmia.
- The signs are facial swelling, pain, anaesthesia & trismus.
- Neurologic – Headache, nausea & vomiting
- Cervical mass
- Ophthalmologic – proptosis, external ophthalmoplegia and blindness.

On clinical examination, lesion appears as cherry red, polypoidal mass in upper third of the nasal cavity. It is a vascular tumour and bleeds profusely on biopsy. Nodal or distant metastases are rare at the time of presentation. Eventually about 10% of patients develop neck metastasis. Extension to the orbit or dura made worse prognosis.

Staging: by Kadish et al[2]
- Stage A: confined to nasal cavity.
- Stage B: Extends to one or more paranasal sinuses.
- Stage C: Extends beyond nose and PNS.

Investigations
- 1. Basic blood investigation.
- 2. Rigid Nasal endoscopic examination
- 3. X-ray PNS shows calcification
- 4. CT scan to rule out intracranial extension.
- 5. Urinary VMA to rule out neuroendocrine tumour[5].

Treatment
- Wide excision with postoperative radiation is frequently recommended for this cancer.
- Chemotherapy is reserved for recurrent, residual, metastatic or unresectable disease. [4]

References: