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# PRIMARY SQUMAOUS CELL CARCINOMA OF PAROTID GLAND
# ( A RARE CASE REPORT)

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- INTRODUCTION:

Squamous cell carcinoma arising denovo from parotid gland is a rare malignancy comprising less than 1% of all salivary gland neoplasms. More commonly it is metastatic to intraparotid and periparotid lymph nodes from ipsilateral cutaneous malignancy of face and scalp. Metastatic cancer accounts for less than 10% of all malignancies found in parotid gland.

## CASE REPORT :

- A 65-year old non-smoker presented with painless mass increasing in size in left parotid since 6 months. No history of cough, hemoptysis, hoarseness of voice or any lesion on skin of scalp, head and neck. FNAC from lesion showed few clusters and sheets

of atypical squamous cells having dense eosinophilic cytoplasm, increased nucleo-cytoplasmic ratio and anisonucleosis(fig.1&2). A diagnosis of carcinoma with squamoid differentiation was made. USG showed a lobulated hypoechoic lesion measuring 6*5cms in left parotid gland. CT scan revealed a heterogenous mass lesion infiltrating both deep and superficial lobes of parotid gland.

- Chest x-ray and other lab investigations were within normal limits. Patient underwent radical parotidectomy with lymph node dissection. On gross examination we received parotidectomy specimen along with 10 lymph nodes, the specimen measured 13*13*3cms. The cut-section was grey white with foci of hemorrhage and necrosis. Microscopically the tumour was composed of single population of well to moderately differentiated malignant squamous cells in sheets and nests with desmoplastic stroma. Tumour sells showed increase in nucleocytoplasmic ratio, anisonucleosis, moderate amount of cytoplasm and evidence of keratinisation. Keratin pearl formation is seen at places (fig. 3,4,5,&6). A squamous metaplasia and dysplasia of adjacent ducts were seen. No vascular or lymphatic or perineural invasion is seen. All the 10 lymph nodes were free of tumour and showed reactive hyperplasia. Sections stained with periodic acid-Schiff stain were negative. With no other demonstrable primary source of origin, a final diagnosis of primary squamous cell carcinoma of parotid gland was made. The patient was sent to radiotherapy.

DISCUSSION : Primary squamous cell carcinoma of salivary glands has been defined by WHO as “a primary malignant epithelial tumours composed of epidermoid cells, which produce keratin and/or demonstrate intercellular bridges by light microscopy.” The mean age of presentation is at 64years. The male-to-female ratio is approximately 2:1. patients typically presents in advanced stage with rapidly enlarging mass around the angle of mandible accompanied by cervical lymphadenopathy and facial nerve involvement. Grossly these are solid, firm to hard, tan-white tumours with infiltrative margins with foci of necrosis.

Histopathologically most tumours are well to moderately differentiated squamous cell carcinomas with desmoplastic stroma and evidence of perineural invasion or soft tissue extension. Even though some cells may appear hydropic at times, intracellular mucin is absent and micin stains are negative. Squmaous metaplasia and dysplasia of adjacent salivary ducts are common associated findings. Since these tumours are high grade, aggressive malignancies, concurrent cervical and intraoerotid lymph node metastasis are frequently observed. On electron microscopy the malignant cells demonstrate numeros cytoplasmic processes and well developed desmosomes. Majority of the cells contain intermediate filaments in their cytoplasm, while secretory granules are absent. It must also be distinguished from mucoepidermoid carcinoma as it is typically composed of variable cell population, including mucocytes basaloid and intermediate cells, in addition to epidermoid cells and many exhibit cystic areas and focal clear cell deferentiation and proximate keratinisation is absent which is disctent feature of squamous cell carcinoma. Histochemical stain of intercellular mucin to rule out high grade mucoepidermoid carcinoma are recommended before making a definitive diagnosis of PSCC.

Age more than 60years, ulceration, deep fixation, facial nerve involvement and cervical node metastasis are significantly associated with poor prognosis. The treatment of choice is radical surgery but radiation therapy ia also effective. Inspite of adequate therapy 5 year survival rate remains at 25-30%.

- CONCLUSION : Primary squamous cell carcinoma of salivary gland is rare aggressive type of carcinoma with poor prognosis. It has to be distinguished from other carcinoma of salivary gland with squamous component for definitive diagnosis to asses prognosis.

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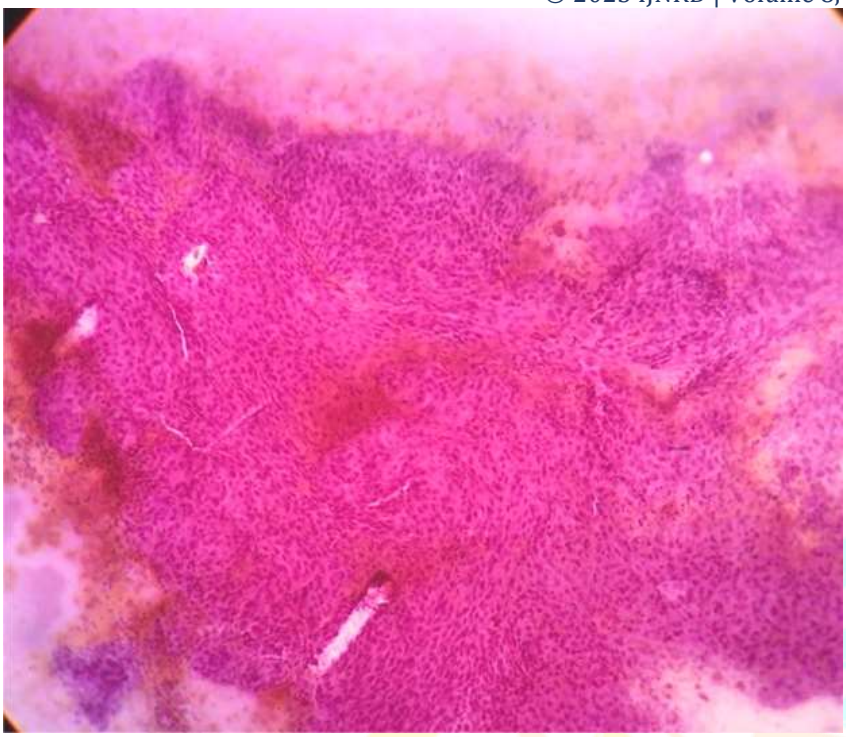

*Fig 1:FNAC showing Sheets of pleomorphic squamous cell(H&E 10X)*

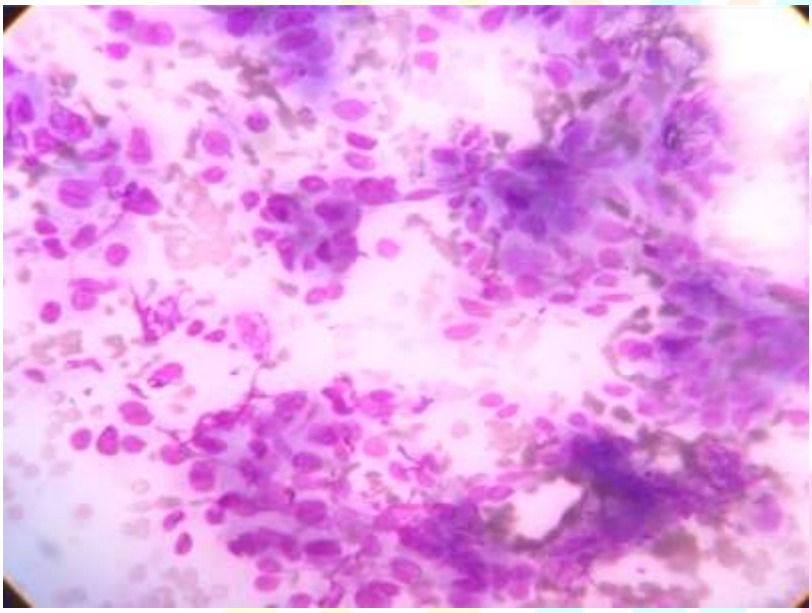

*Fig 2: showing pleomorphic squamou cells(leishman's stain 40x)*

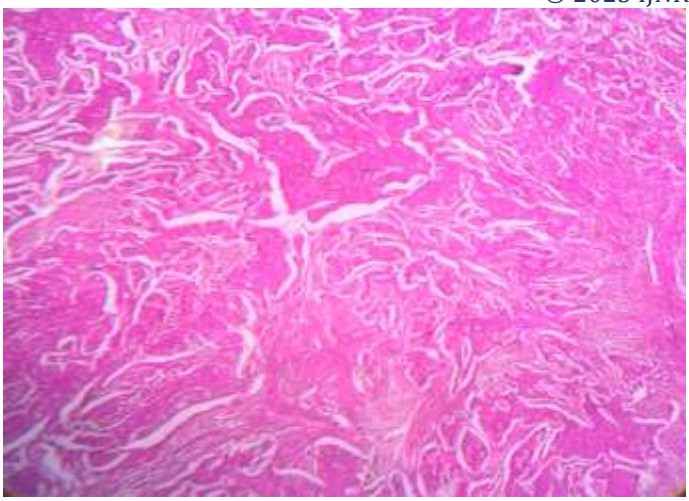

*Fig 3: HPE of squamous cell carcinoma (H&E,40x)*

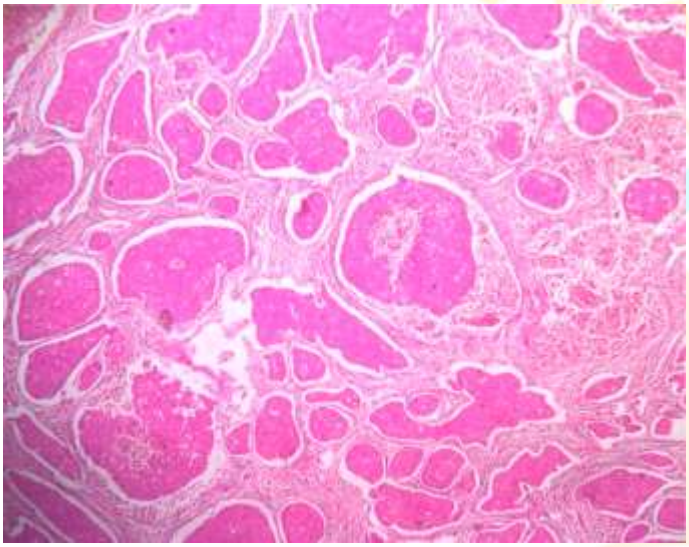

*Fig 4:HPE(H&E,100x)*

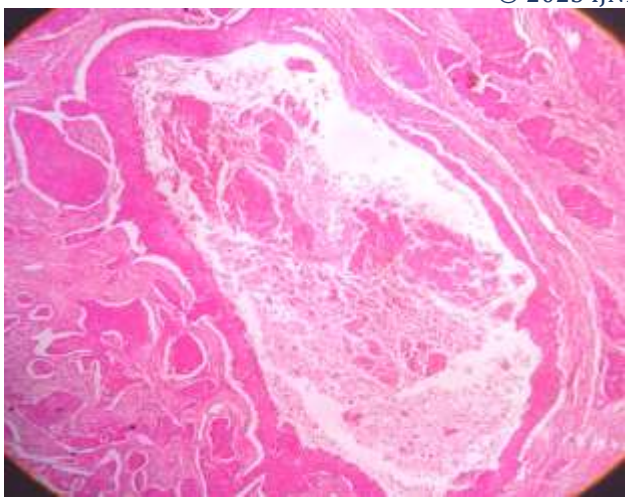

*Fig 5:HPE(H&E,100x)*

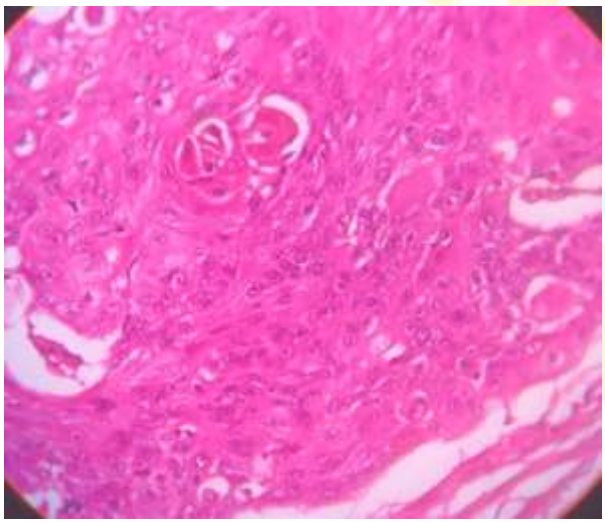

*Fig 6:HPE showing keratin pearls(H&E,100x) (arrow).*