



MUCOEPIDERMOID CARCINOMA OF PAROTID GLAND INVOLVING THE PINNA - A CLINICO-PATHOLOGICAL PERSPECTIVE.

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ABSTRACT

Mucoepidermoid carcinoma of major salivary gland. The main purpose of this article is to report a case of Mucoepidermoid carcinoma in 50 years old male who presented as painless firm swelling with over ulceration of left parotid region involving area below left ear lobule. The lesion was examined preoperatively. Excisional biopsy was carried out from superficial lobe of parotid with special focus on facial nerve. Post-operative recovery was uneventful with no defect of facial nerve function. HPE report confirmed that tumour was Mucoepidermoid carcinoma of parotid gland.

KEYWORDS

Carcinoma, Mucoepidermoid, pinna.

Introduction:

Mucoepidermoid carcinoma is most common in adult. It is also found in other organs such as bronchi, lacrimal sac and thyroid. Peak incidence is from 20-40 years of age. A causal link with cytomegalo virus has been strongly implicated. It presented as firm to hard painless, slow growing mass. On histology tumour is not encapsulated and characterized by squamous cell, mucous secreting cell.

Mucoepidermoid carcinoma of salivary gland characterized by a recurrent t(11:19) (q21:p13) chromosome translocation resulting in a MEC1-MAMLL fusion gene. The CREB binding domain of the CREB coactivator MECT1 is fused to transactivation domain of the notch coactivator MAMLL.

Case Report:

50 years old male developed a painless, firm, small swelling below left ear over duration of 1 month. Swelling was insidious onset and gradually increasing in size and it reached up to left angle of mandible. Patient also complaint pain with some purulent discharge. On examination Swelling was 2.5 cm² firm, irregular, non-tender and ulceration over swelling was present. [Fig-1] No cervical lymphadenopathy present. Facial nerve intact. Routine blood examination was found within normal limit. Chest x-ray found was found within normal limit. Incisional biopsy was taken under local anaesthesia. And specimen send for histopathological examination. On gross examination grey brown tissue piece measuring .8 cm². On microscopic examination Sections shows an infiltrating tumour displaying small nests of clear cell along with area of squamous differentiation. The clear cells display small round central nucleus and abundant amount of clear cytoplasm. Numerous mitotic figures are seen. The squamous cell shows moderate anisonucleosis with round to oval nucleus, coarse chromatin, prominent nucleoli and moderate eosinophilic cytoplasm. [Fig-2]

Discussion:

In 1945, Stewart et al^[1] recognized Mucoepidermoid of the salivary gland as a separate entity among salivary neoplasm. Mucoepidermoid Carcinoma is thought to arise from pluri-potent reserve cells of the excretory ducts of salivary gland that have the potential to differentiate into squamous, columnar and mucous cells.^[2] Although no specific etiologic factors have been identified exposure to ionizing radiation has been reported in some cases.^[3] A mucoepidermoid carcinoma account for 5% of all salivary gland tumours commonly arise within the parotid gland and is the most common malignant tumour to arise in children and adolescents under 20 years of age.^[4] The tumour is a firm to hard mass and usually asymptomatic. Pain is associated with high grade malignant tumours. Mostly they do not cause facial nerve paralysis when they occur in parotid gland.^[5] Mucoepidermoid carcinoma, have a prognosis based upon the clinical stage and histological grade with a good prognosis of Mucoepidermoid carcinoma in children as majority of them are well differentiated or grade I neoplasm.^[6] Low grade mucoepidermoid carcinoma has a better 5 year survival rate from 92–100 % compare to high grade mucoepidermoid carcinoma with 0–43 % survival rate with an overall incidence of lymph node involvement ranges from 18–28%.^[7] Postoperative local recurrence is more likely to occur in patients with positive margins regardless of the grade.^[8]

The histological pattern in mucoepidermoid carcinoma consists of a combination of squamous and mucous cells arranged in cords, sheets, or cystic configuration and are classified as low, intermediate or high grade Mucoepidermoid carcinoma is treated surgically with local wide block excision for low grade neoplasms and wide block excision with radical neck dissection for high grade neoplasms where there is clinical evidence of regional metastasis, high TNM stage, high histological grade and involvement of regional lymph nodes.^[9-11] Radiotherapy should be used only in selected cases because of long term adverse effects and the role of chemotherapy in the management of mucoepidermoid carcinoma is generally reserved for patients with aggressive local or metastatic disease that is not amenable to surgical or radiation therapy with long term follow up is essential to rule out late recurrence.^[12]

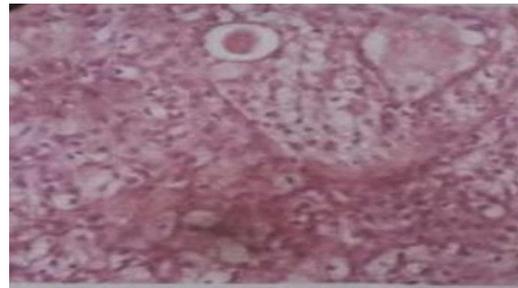
Conclusion:

Mucoepidermoid carcinoma of parotid gland involving the ear pinna is very rare. Clinical stage and histological grade are the main prognostic factors.

Figure-1 Swelling over ulcerative lesion just below left Pinna.



Figure-2 Histopathological finding shows malignant squamous epithelial cells and a few intermediate cells.



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