Case Report

# GIANT MUCOEPIDERMOID CARCINOMA OF PAROTID GLAND

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**Abstract**
Parotid gland is a common site for different types of malignancy. Mucoepide rmoid(MEC) tumour is a mucous secreting tumour of epithelial origin. The cellular heterogeneity, the histologic composition, biological behaviour and clinical course of MEC varies. The tumours are usually slow growing and of low metastatic potential but sometimes the tumour are rapidly growing with a high metastatic potential. We report a case of Giant Mu coepidermoid Carcinoma of parotid gland with extensive neurovascular and lymph node involvement in a young female.
**Keywords**: Mucoepidermoid,Superficial Parotidectomy,Facial Nerve.

**Case presentation**
A 13 year old girl reported with extensive growth over right side of face. The period of onset to its present size was 8 months. Patient had feeling of heaviness and dull aching pain. The swellings on the upper margin was from the base of ear lobule and reaching up to the upper part of thyroid cartilage. Posteriorly, it was more extensive and was reaching up to the nuchal line. Size of the swelling was about 15 cm in vertical and 20 cm in horizontal direction. Swelling was nontender, irregular in shape and hard in consistency. Skin over the swelling was immobile and fixed to the underlying structure. Multiple neck nodes on ipsilateral side were involved. The average size of the lymph nodes was 2 to 3 cm. Most of them were hard and fixed. Detailed physical examination and radiological investigation were done. Fine needle aspiration cytology was done from different sites of the tumour. CT scan showed tumour encasing deep lobe of parotid gland, involving facial nerve, external carotid arter, internal jugular vein and group 2 and 3 neck lymph nodes. No distant metastasis was found. FNAC showed Mucoepidermoid Carcinoma. The tumour was staged as T4N2M0.

Superficial Parotidectomy along with wide resection of tumour was done. Tumour encasing the neurovascular bundle was removed .Stage 2 and 3 neck lymph node dissection was done. Postoperative period was uneventful. No facial muscle weakness or sign of facial nerve damage was seen. Carotid and jugular vessel were preserved. Patient is on regular radiotherapy with satisfactory outcome.

**Fig 1. Giant Mucoepidermoid carcinoma Parotid gland with lymph node involvement.**

**Fig 2: Mucoepidermoid carcinoma of Parotid gland.**

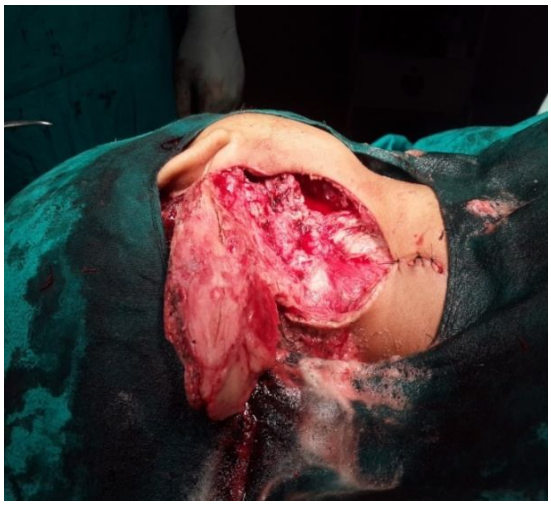

**Fig 3. Perioperative image showing extensive involvement of underlying structure, skin and sub- cutaneous tissue.**

## Discussion

Salivary glands are common site for benign and malignant tumours. Mucoepidermoid Carcinoma consists of Squamous, Columnar and Mucous cells in different proportions along with connective tissue elements[1]. As a result of this cellular heterogeneity and histologic composition the biological behaviour and

**Fig 4: Postoperativeimage: No facial muscle weakness.**

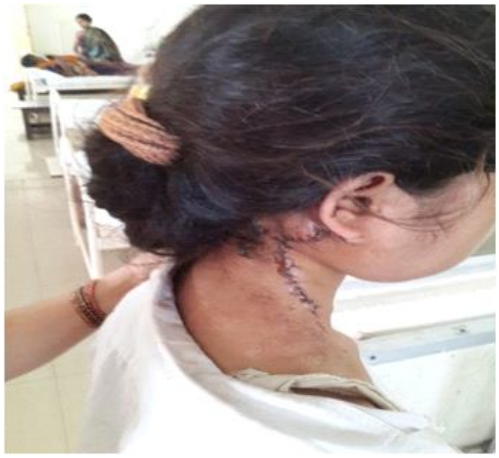

**Fig 5. Posteriorview line of skin closure.**

clinical course of MEC vary. Although MEC accounts for less than 10% of all tumours of the salivary gland, it constitutes approximately 30% of all malignant tumours of the salivary gland[2]. Among the major salivary glands, MEC occurs most frequently in the parotid gland. In 1945, Stewart and colleagues[3] introduced the term Mucoepidermoid to define a distinct salivary gland tumour

characterized by a mixed pattern of the following two main cell types: epidermoid and mucus-producing cells. In their original report, Stewart and colleagues[3] defined benign and malignant varieties of mucoepidermoid tumours. Nonetheless, subsequent metastases of few of the previously benign tumour have led to all mucoepidermoid tumours being considered as carcinoma[4]. They can recur and can metastasize to regional lymph nodes or distant viscera**.** In our patient the tumour was locally invasive and metastasized to regional lymph node. MEC operated at early stage can give the patient a tumour free life. Surgery should be the treatment of choice in all MEC. Radiotherapy is reserved for inoperable tumours , post operative residual tumours and tumours with lymph node involvement. Because of the relative rarity of these tumours and the remarkable variability in their biological behaviour, opinions differ about the appropriate classification, grading, and treatment.[5-8] Although some authors classify MEC into low and high grade types, others favour a 3-tier system that includes an intermediate grade.[9-10]

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