



# MUCOEPIDERMOID TUMOR OF DEEP LOBE OF PAROTID PRESENTING AS A SOFT SWELLING - A RARE PRESENTATION

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## ABSTRACT

Salivary tumours are most commonly seen in the parotid gland. The majority of tumours in the superficial lobe manifest as slow-growing, painless swellings beneath the ear, in front of the ear, or in the upper neck. Tumors of the accessory lobe are less predominant and manifest as chronic swellings in the face. Tumors in the deep lobe of the gland might occasionally present as a parapharyngeal lump. Snoring as well as difficulty swallowing are two common symptoms. A diffuse firm swelling in the soft palate and tonsils is seen on clinical examination(1). This patient presented with a soft swelling from the deep lobe of parotid gland thus making it a rare presentation

## Key words:

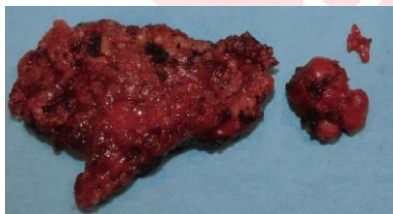
Parotid swelling, mucoepidermoid tumor, carcinoma

## INTRODUCTION:

A review of the literature indicates that mucoepidermoid carcinoma (MEC) is the second most common malignant salivary gland neoplasm. It presents as a firm to hard swelling in the parotid region originating from the superficial lobe. Deep lobe parotid tumors may present as unilateral tonsil hypertrophy or soft palate bulges, which are actually due to a mass effect within the parapharyngeal space pushing the palatine tonsils midway within the oropharynx. Deep lobe parotid tumors may have no outward signs or symptoms and are often found incidentally on imaging. This patient presented with a soft swelling from the deep lobe of parotid gland thus making it a rare presentation

## CASE REPORT:

75-year-old male presented with % Swelling over the left cheek for 25 years, insidious in onset progressive in nature, started initially as a tiny swelling and progressed to current size C/O swelling in the left parotid region since he was 50yrs old, gradually increased to the present size, not associated with pain restrictions in movements of jaw or difficulty in eating food, No previous history of Trauma, No Fever episodes, No other systemic complications & co-morbidity. On examination, a single swelling over the left parotid region measuring 5x4 cm lifting the ear lobe and is well demarcated. On palpation, the swelling is not warm and not tender. It is soft in consistency, skin over the swelling is pinchable. Swelling is fixed to the underlying tissue. Right parotid normal. All routine investigations were done and normal. USG superficial swelling: multiple enlarged heterogenous lymph nodes left side measuring 3.8x2.3 cm with internal, peripheral vascularity and calcification noted within over left temporomandibular joint. Patient was taken up for radical parotidectomy with lymph node dissection.

**left parotid enlargement****Specimen****HISTOPATHOLOGICAL EXAMINATION:**

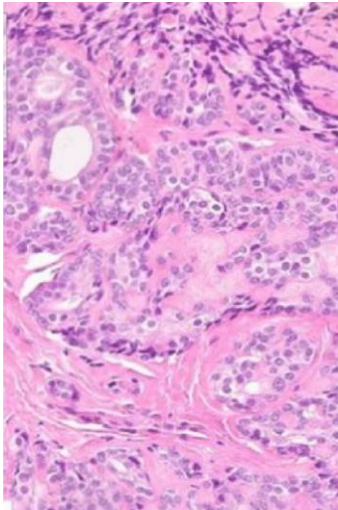
Section shows salivary gland tissue with a well circumscribed neoplasm arranged as

infiltrating nests and anastomosing trabeculae, cystic spaces containing abundant secretions cribriform pattern comedo and micropapillary pattern with intervening desmoplastic stroma. The Lining cells have moderate to abundant eosinophilic cytoplasm with moderately pleomorphic vesicular nuclei and prominent nucleoli. Mitotic figures are evident. The tumor is seen reaching up to the inked surface focally. Abundant areas of necrosis and areas of microcalcification is seen. No lymphovascular emboli or perineural invasion are seen. Periphery shows normal salivary gland tissue.

**REGIONAL LYMPH NODES: SINGLE LEVEL IB AND SINGLE LEVEL IA LYMPH NODE SHOW REACTIVE HYPERPLASIA, FREE OF TUMOR**

Pathological classification (PTNM, AJCC 8th edition)

pT3/N0/Mx (Stage 3)

**Histopathological image of the resected specimen****DISCUSSION**

Minor salivary gland epithelial neoplasms account for ~ 10–15 percent of all salivary gland neoplasms. (2) Mucoepidermoid tumour is the most frequent salivary gland malignancy, and it can affect the parotid gland. Despite the fact that it accounts for 30% of all salivary gland cancers, it only accounts for 10% of salivary gland malignancies and < 5% of all head and neck malignancies. Well over half of these tumours are detected in the major salivary glands, with > 80% in the parotid gland, ~8–13% in the submandibular gland, ~2–4% in the sublingual gland, and the rest in minor salivary glands, most often in the palate. (3) A low-grade malignancy is defined by a slow-growing, asymptomatic swelling that rarely reaches 5 cm, whereas a high-grade malignancy is defined by fast growth, painlessness, infiltration into nearby tissues, and the evidence of distant metastases and extra-oral ulceration.. (4) The prognostic factors of mucoepidermoid tumor of parotid includes sex, age, histological grade and surgical margins (4). Low grade mucoepidermoid tumors of the parotids usually have a better prognosis than high grade mucoepidermoid tumors of the parotids. However, even in high-grade mucoepidermoid tumor of the parotid in individuals with an early-stage malignancy, prognosis is good. (5). If left untreated, it can develop large enough to encircle the facial nerve, necessitating removal of the nerve or one of its branches. The use of multimodal imaging, as well as a multidisciplinary team approach and a complete clinical history, to diagnose these tumors early is crucial in predicting favorable disease outcomes. (6)

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