

**POLYPOIDAL MUCOEPIDERMOID CARCINOMA OF SOFT PALATE: AN  
INCIDENTAL FINDING IN A CHILD****\*Dr. Surekha Yadav, Sarika Singh, Nita Khurana and P. K. Rathore**

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**ABSTRACT**

Paediatric mucoepidermoid carcinoma of the palate is a rare tumour. The incidence of epithelial salivary gland tumours in children and adolescents is 3.7-5.5%. The malignant salivary gland neoplasm is found mostly in the parotid gland. Mucoepidermoid carcinoma (MEC) comprises a mixture of three types of cells- intermediate type cells, mucus-producing cells, and epidermoid or squamous cells. MEC is a diagnostic challenge when it appears as asymptomatic swelling in minor salivary glands in the paediatric patient. This case report describes an unusual case of incidental palatal mucoepidermoid carcinoma in a young child who underwent biopsy for suspected papilloma.

**KEYWORDS:** Mucoepidermoid carcinoma, epidermoid.**INTRODUCTION**

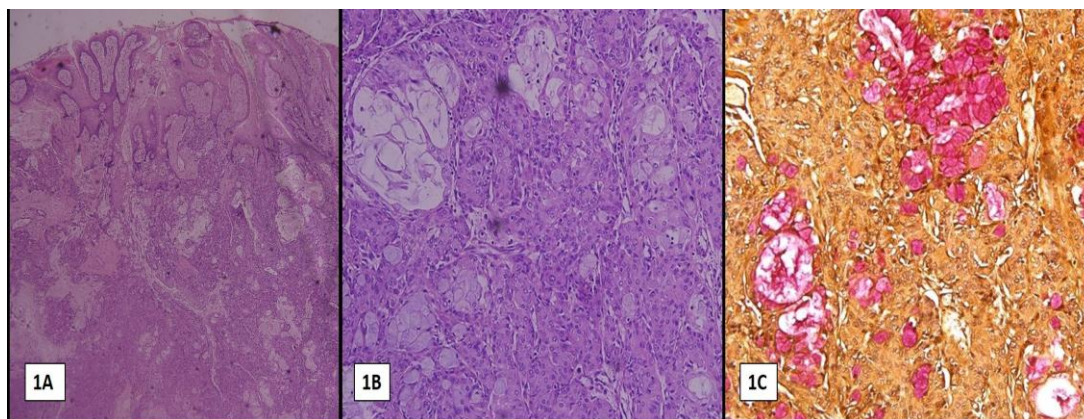
Mucoepidermoid carcinoma (MEC) is one of the common salivary gland malignancies. In children and adolescents, the frequency of epithelial salivary gland tumours is 3.7% to 5.5%.<sup>[1]</sup> There are few cases reports of palatal mucoepidermoid carcinoma in paediatric patients.<sup>[2]</sup> The most common site of MEC is the parotid gland. Rarely soft palate, hard palate, junction of the hard and soft palate, retromolar area, the floor of mouth, lips and tongue are involved.<sup>[3]</sup> This case report describes a rare case of incidental palatal low-grade MEC in a 12-year-old boy.

**CASE REPORT**

A 12-year-old boy presented to ENT department with complaints of swelling in the oral cavity for one and half month. There was no history of bleeding or pain or difficulty in swallowing. There was no significant past medical or surgical or family history. The swelling was polypoidal, soft, blue, translucent, compressible, painless and non-tender on the right side of the soft palate, measuring 1x1 cm. There was no evidence of lymphadenopathy. The patient underwent biopsy.

On gross examination, the tissue was in multiple pieces, measuring 1x1x0.5cm. The cut surface was soft, grey white and predominantly solid. No haemorrhage or necrosis identified. On microscopic examination, the tumour was predominantly solid. There was a focal of glands, tubules, and nests. The tumour comprised of three type of cells- mucous cells, squamous cells and intermediate cells. The mucus cells were tall columnar with light grey blue mucinous cytoplasm. (figure 1a) The

intermediate cells were polygonal with the bland nucleus and amphophilic or slightly eosinophilic cytoplasm. There was no anaplasia, necrosis, vascular, perineural or bony invasion. Mitotic count was 1/10 HPF. The tumour was infiltrating deep into underlying soft tissue and focally extended upwards into the overlying mucosa with infiltrative edges (figure 1b). Mucicarmin stain was positive. (figure 1c) The diagnosis was as low-grade mucoepidermoid carcinoma, according to the Brandweins scoring system.<sup>[4]</sup> The patient underwent wide excision of the same.



**Figure 1A:** Photomicrograph showing solid tumour with its extension into the overlying epithelium (HE 100X).  
**1B:** Photomicrograph showing solid tumour pattern with few gland formation. Tumour cells containing both intra and extra cellular mucin (HE 200X).  
**1C:** Mucin (intra and extra cellular) positive by mucicarmine stain (200 X).

## DISCUSSION

Mucoepidermoid carcinoma is one of the most common neoplasms of the salivary gland. It is mostly found in the major salivary (parotid) gland in the adult patients. Only a few cases report of the minor salivary gland tumour in paediatric patients have been cited in literature.<sup>[2]</sup> The origin of MEC of the oral cavity is the ductal epithelium of the major salivary glands or minor salivary glands.

There are few case series in literature which describes the low incidence of epithelial minor salivary gland neoplasms in the paediatric population. Ritwik et al<sup>[5]</sup> found that 3.5% of the MEC of minor salivary gland occurred in patients of age 19 years or in younger.

The patients with major salivary glands and tongue involvement present with paresthesia, pain, and difficulty in swallowing. In the present case, mucoepidermoid carcinoma was not considered as differential diagnosis due to its unusual clinical presentation. The lesion was predominantly solid making a diagnosis of MUC highly unlikely.

## CONCLUSION

The correct histomorphology and a high index of suspicion is required to make a prompt diagnosis since this is a malignant salivary gland tumour with local aggressiveness.

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