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内文:

## Introduction

Mucoepidermoid carcinoma (MEC) is one of the most common salivary gland malignancies.

Most common site of occurrence is parotid gland, then second is in minor salivary glands: palate, retromolar area, floor of mouth, buccal mucosa, lips, and tongue.

MEC is composed of a mixture of cells, including mucus-producing, epidermoid or squamous, and intermediate types.

Few series or case reports describing salivary gland tumors in the pediatric population have been published.

This report describes an additional case of a low-grade MEC affecting the palate of a 12-year-old girl.

# Case report



Age: 12 years old

#### Gender: Female

Chief complaint: pain in maxillary left central incisor and mandibular left lateral incisor.

**PI:** She had a history of untreated Ellis II trauma and grade two mobility in these teeth for two years.

#### **Physical examination:**

clinical examination revealed enlargement of the soft tissue in left posterior hard palate.

8mm diameter, firm, painless, and nontender mass, overlying the palate with normal color of mucosa, near the teeth 24 and 27, and the median palatal raphe was clearly identified.

Palpable submandibular and cervical lymph nodes were found.

Denied any symptoms attributed to the mass.

Adjacent teeth had no mobility or displacement, and electrical pulp test (+)

## **Radiography finding:**

1. In panoramic and periapical radiographs the alveolar bone had no resorption and the

floor of the maxillary sinus appeared intact.

2. Axial plain CT examination showed a moderately enhancing soft-tissue density lesion extending posteriorly and inferiorly destroying the hard palate and the alveolar process.





No other abnormalities, including palpable submandibular and cervical lymph nodes, were found.

# **Histology finding:**

fine needle aspiration yielded no fluid -->

**a local oral surgeon** performed **an open biopsy** and noticed a sinus opening near the foramen palatinum majus.



FIGURE 3: Histopathology showing mucous secreting cells and intermediate cells.

Microscopic analysis revealed a low-grade mucoepidermoid carcinoma By the end of the third year CT and oral examination showed no problem.



## Discussion

**Epithelial salivary gland neoplasms** are rare both in adults and children, accounting for less than 3% of all head and neck tumors.

5% of these tumors occur in patients younger than 18 years old with girls mostly affected, while its occurrence in newborns is exceedingly rare.

## Malignancy seen in salivary gland tumors:

50% in children and 15–25% in adults

As a typical intraoral presentation this malignancy has a painless and persistent enlargement, which lasts for about a year.

Paresthesia(皮膚感覺異常), pain, and difficulty with swallowing are noted frequently when major salivary glands and tongue are involved.

**Intraoral lesions** are observable as a **localized fluctuant nodule** with a **bluish** or reddish-purple, smooth, mucosal surface. And mucus may be discharged from the tumor through a small sinus tract.

#### MEC

1. Low-grade, mucous cells are predominate.

High-grade MEC epithelial cells are predominantly squamous

2. Low-grade tumors are soft and compressible

high-grade lesions may be quite firm and accompanied with ulceration, resorption of bone, and numbress of adjacent teeth.

3. Radiographically:

Low-grade MECs are similar to benign mixed tumors, demonstrating smooth margins and are characterized by cystic components containing mucin.

High-grade MECs have poorly defined margins, local infiltrations, and solid appearances.

#### DD

**Palatal mass** includes reactive and neoplastic lesions. In children, the most common of these entities is the **palatal space abscess derived from pulpal necrosis**. They are differentiated by tooth mobility, diffuse, erythematous swelling of sudden onset, suppuration, fluctuation in lesion size, and radiographic evidence of inflammatory pulpal disease.

1. **Mucocele** is a frequently seen fluctuant reactive lesion of salivary glands, with **transparent blue swelling** including **mucin**.

2. **Deep mucoceles**, often surrounded by a fibrous tissue wall, do not fluctuate, and if located at sites other than the lower lip cannot clinically and reliably be differentiated from salivary gland tumors.

This case was not similar to a mucocele because mucin discharged from a sinus opening.

3. Palatal region vascular malformations like **hemangiomas** are differentiated by clinical examination and imaging.

4. **Neurofibroma** and **schwannoma** are occasionally encountered as compressible or firm asymptomatic nodules and pink in color unless they are secondarily traumatized. **Treatment-**

# The tumor is dissected down to the periosteum to obtain adequate tumor-free margins. But, if there is any evidence of bony involvement, removal of a portion of the jaw is

But, if there is any evidence of bony involvement, removal of a portion of the jaw is necessary. Overall survival rate has been linked to histocytologic grade with 95%-100% in low-grade and 25%-43% in high-grade tumors.

1.Micro marsupialization(袋型縫合術), cryosurgery(冷凍手術), and laser therapy are **contraindicated** in management of an intraoral submucosal mass/nodules in children particularly if the palate is involved.

Because these kinds of treatments may result in local spread of the tumor, and more aggressive surgery may be needed.

2. **Radiation therapy** should be used judiciously in pediatric patients with high-grade histology, positive margins, and lymph node involvement, due to its long-term consequences as facial deformity, trismus, xerostomia, osteoradionecrosis, and risk of secondary malignancy.

3. Chemotherapy was not used as an adjuvant therapy in our patient and does not currently have a role in the standard treatment of MEC patients.

-->There is a potential risk of the development of a mucoepidermoid carcinoma in parotid and minor salivary glands of children who have received **chemotherapy and cranial irradiation**.

Survivors of the childhood cancer must be followed closely throughout their lifetime for the risk of developing a secondary malignancy following the treatment of childhood cancer.

#### Conclusions

Although mucoepidermoid carcinoma and other tumors in this region are exceedingly rare, patients with these kinds of swellings must be considered cautiously, and multidisciplinary approach can lead to successful treatment.

題號	題目
1	關於 mucoepidermoid carcinoma(MEC)黏液表皮樣癌敘述,何者為非。
	(A) 多發生在 21-60 歲之間
	(B) 好發於腮腺
	(C) 好發於男性多於女性
	(D) 為一種惡性度不一的腫瘤
答案(C)	出處:A Textbook of Oral Pathology(許輝吉編譯-口腔病理學)
	其好發於 21~60 歲之間,無性別差異
題號	題目
2	一名 44 歲中年男子,在去年因車禍造成 21 有 crown fracture,一年後在
	上顎產生有廔管的疼痛腫脹(9mm in diameter)而來到醫院就診,臨床檢
	查結果為 21 mobility Grade II, EPT(-), 腫脹處為軟組織,質地 firm。
	以下何者為非?
	(A) 可能發展成惡性病變
	(B) 可能是小唾液腺腫瘤
	(C) 組織切片可能可以見到黏液分泌細胞
	(D) 藉著手術移除後復發率很低
答案(D)	出處:A Textbook of Oral Pathology(許輝吉編譯-口腔病理學)
	惡性的狀況下可能是 MCE,這類病灶的惡性度不一,惡性度高者,好
	侵犯周圍組織,且有相當高可能有局部淋巴轉移。異常見肺,骨,腦,
	及皮下組織之遠端轉移。惡性度低者為含黏液之囊腫,且包被不全。手
	術後之轉移及再發病不在少。