

Original research article**Congenital soft palate mass: A rare occurrence**

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Abstract

Background and objectives: The purpose of this paper is to describe a very unusual example of a congenital mass of the soft palate. To underline how important, it is to rule out the possibility of a congenital soft palate mass in children who have had episodes of choking or who have trouble eating.

Methods: A case study was performed by Department of ENT, Andhra Medical College from December 2021 to November 2022; of a rare occurrence of congenital soft palate mass in 5 year old baby, where excision biopsy was done.

Result: Biopsies reveal squamous epithelium-lined mature cartilage. There was no sign of cancer. Residual cartilage from meckel (hyaline cartilage)

Conclusion: According to the biopsy result and clinical correlation, this mass is most certainly a "congenital remnant of meckel's cartilage".

Keywords: Meckel's cartilage, soft palate, excision biopsy, congenital remnant

Introduction

Around 600 to 1000 minor salivary glands are thought to be dispersed across the oral mucosa as distinct masses of secretory tissue. The most of these glands are found in the mucous membranes of the mouth, specifically the lips, tongue, buccal mucosa, and palate. Secretions from each gland drain through a single duct into the mouth, and their consistency and nature vary widely ^[1, 2, 3].

Clinicians may struggle with making a correct diagnosis when dealing with palatal diseases. Palate enlargement or growth can be caused by several different pathologies, including periapical lesion, periodontal disease, a reactive process, small salivary gland pathologies, or a neoplastic process. Palatal lesions can manifest in a broad variety of ways, making dental etiology a crucial factor in making a diagnosis ^[3, 4, 5].

Because there are so many minor salivary glands in the palate, malignancies of the salivary glands should be taken seriously as well. Small salivary gland tumors are a rare clinical entity, making up just 10% - 25% of all salivary gland tumors. Around 65% of all salivary gland tumors are pleomorphic adenomas, and pleomorphic adenomas are the most prevalent type of tumor of the minor salivary glands.

The causes of a mass in the palate might be developmental, inflammatory (such as periapical lesions or periodontal disorders), reactive, or neoplastic (affecting the minor salivary glands). In some cases, they are inherited, but in other others, they are acquired ^[5, 6].

Material and Methods

Individuals who visited the ENT OPD at Andhra Medical College from December 2021 to November 2022, were included in the study.

Examining the oral cavity A 4*3*2CM pale pink tissue mass was observed extending into the oral cavity from the right anterior pillar. The lump was firm in consistency, had a smooth surface and well-defined edges, was not tender, and did not bleed on touch. No abnormalities were found during the video laryngoscopy. The gag reflex and palatal reflexes were present. Diagnostic nasal endoscopy: The tumor has no extension into the nasopharynx or nasal cavity.

A 5-month-old baby who suffers from choking episodes while taking feeds, difficulty in swallowing and having soft tissue mass prolapse from the buccal mucosa while crying or coughing since birth was brought to the OPD.

O/E of the mouth: Inspection: A 4*3*2CM pale pink tissue mass that was connected to the right anterior pillar and extending into the oral cavity was discovered. Palpation- Inspectory findings verified that the mass was firm in consistency, smooth with well-defined edges, non-tender, and not bleeding on touch. There was also no rupture in the mucosa ^[5, 6].

Result

Intervention: Under general anesthesia, the lesion was surgically removed. Bipolar cautery was used to

completely remove the mass, and the specimen was then sent for histopathological examination. Excision biopsy done.



Fig 1: Schematic representation of oropharynx

Discussion

Mature cartilage lined by squamous epithelium, according to the biopsy report. No indication of cancer. Remnant of meckel's cartilage (hyaline cartilage).

Meckel's cartilage's fate:

Posterior/proximal: Malleus, incus.

Intermediate/Central: Trans-differentiation, autophagy, and apoptosis of the anterior portion. Spheno-mandibular ligament, malleus posterior portion anterior ligament.

Distal/anterior: Mandibular symphysis (remnants in the midline of the mandible) ^[7, 8].

Conclusion

Whenever a child suffers of choking episodes or aspiration in infancy, it is imperative that any congenital masses of the soft palate (oropharynx) be ruled out as possible causes. According to the biopsy result and clinical correlation, this mass is most certainly a "congenital remnant of meckel's cartilage".

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Conflict of interest

Nil

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