Pleomorphic Adenoma

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INTRODUCTION

Pleomorphic adenoma (PA) is a benign salivary gland tumor that is most commonly found in adults but can also occur in children. It typically affects the parotid gland and presents as a painless, slow-growing mass. Although rare in children, pleomorphic adenomas are usually diagnosed early due to their noticeable symptoms. Treatment primarily involves surgical removal, with a good prognosis and low risk of complications, though recurrence can occur if not completely excised.

CASE REPORT

This report describes a 7-year-old female who presented to the UCONN Pediatric Dental Clinic for a routine 6-month recall examination. During the clinical assessment, an abnormal soft tissue mass was identified on the right side of the palate. The patient was asymptomatic, reporting no pain, discomfort, swelling, or asymmetry. Her medical history was notable for snoring and enlarged adenoids, with no significant medication history or allergies. Physical examination revealed a well-defined, non-tender, non-fluctuant intraoral swelling extending to the soft palate junction. Radiographic imaging demonstrated smooth remodeling of the hard palate, without evidence of aggressive features or osseous destruction. An incisional biopsy under intravenous sedation was performed with UCONN OMFS, and histopathological analysis confirmed the diagnosis of pleomorphic adenoma.

PANORAMIC IMAGE



Figure 2.: Imaging indicates mild circumferential wall thickening of the maxillary sinuses. The osteomeatal complexes and lamina propria are intact, with opacification of the osteomeatal units.

PRE-OP PHOTO



12/22/23: Intraoral examination reveals a soft tissue growth on the secondary palate. Mass is not tender, soft on palpitation, and non-fluctuant, and measuring 2.3 x 1.8 x 2.3 cm. Soft tissue growth shows no ulcerations, movable over the palate, and the same color as the surrounding mucosa. Swelling is non painful and does not appear to be aggressive in nature.

CT SCAN FINDINGS



Figure 3. Well-defined, mildly enhancing soft tissue mass of unknown etiology in the region of the hard palate on the right measures up to 2.2 cm in maximum dimension. Differential includes pleomorphic adenoma, solitary fibrous tumor, as well as others. Recommend tissue biopsy for definitive diagnosis

BIOPSY

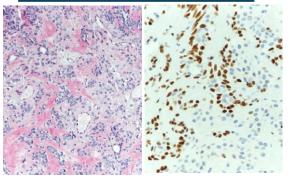


Figure 4. <u>Gross Description</u> Received in formalin is an irregular 0.8x0.5x0.4cm pink, rubbery tissue which is submitted in toto labeled A1.

Microscopic Description Sections reveal a fragment of a well-circumscribed mass composed of a benign proliferation of myoepithelial and glandular epithelial cells arranged in sheets, cords and forming occasional duct-like structures. The duct-like structures have a bilaminar arrangement of internal epithelial and external myoepithelial cells. The intervening stroma is notably hyalinized and hypocellular. All cytologic features are entirely bland.

<u>Special Stains</u> Immunohistochemistry: The periductal myoepithelial component of the tumor is positive for p63 (nuclear)

POST-OP PHOTO



TREATMENT

A circumferential incision was made to excise a 2 x 2 cm palatal tumor, with dissection between the tumor capsule and mucosa. The tumor was removed in toto, and small defects in the hard palate were noted. Mucosal margins and bone samples were sent for pathology. A right-sided buccal fat flap was harvested and tunneled to close the defect. The mucosa was reapproximated with 4-0 Monocryl sutures, and the buccal fat was secured with horizontal mattress sutures.

DISCUSSION

Pleomorphic adenomas of the salivary glands are rarely encountered in children, accounting for only 1–3% of head and neck tumors. Among these, the parotid gland is the most frequently affected, with 60–65% of cases localized there.

This case highlights the importance of thorough intraoral and extraoral assessments during dental visits, as early identification of asymptomatic or slowly enlarging masses can significantly improve outcomes. Pleomorphic adenomas are most frequently found in the parotid gland but may also arise in minor salivary glands of the palate, buccal mucosa, or upper lip. Prompt referral for imaging and biopsy is crucial for confirming the diagnosis and guiding appropriate surgical management. This case emphasizes the role of dental professionals in recognizing uncommon presentations of head and neck pathology and underscores the need for interdisciplinary collaboration to ensure optimal patient care.

CITATIONS

Rachida, B., Kharrat, O., Boughzala, W., Hammouda, S. B., Abdeljelil, N. B., Kolsi, N., & Koubaa, J. (2023). Pleomorphic adenoma of the submandibular gland in a 10-year-old child: A case report. *Ear, Nose & Throat Journal, 102*(11), NP552–NP555. Meshram, G. G., Kaur, N., & Hura, K. S. (2018). Pediatric pleomorphic adenoma of the parotid: Case report, review of literature, and novel therapeutic targets. *Children (Basel, Switzerland), 5*(9), 127

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