

Unusual Presentation of Schwannoma in The Hard Palate of A Child" - A Rare Case Report

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Abstract

Schwannomas are benign tumors of peripheral nerve origin that are frequently present in the head and neck region, and they rarely occur in the oral cavity, especially the hard palate. We present a case of a 13-year-old boy with a palatal schwannoma. The lesion was observed to be a firm, painful, sessile swelling in the left posterior palate, which clinically resembled a pleomorphic adenoma. Surgical excision revealed a schwannoma, which was confirmed by histopathological analysis. There were no complications in the postoperative period. This case emphasizes the need to consider schwannoma in the differential diagnosis of pediatric patients with palatal swellings.

Keywords: Schwannomas, Nerve, lesion, Adenoma, palatal swelling

Introduction

Schwannomas, or neurilemmomas, are encapsulated benign tumors arising from Schwann cells of the peripheral nerve sheath. They comprise 25–40% of extracranial head and neck tumors, though intraoral schwannomas account for less than 1% of cases [1]. Among intraoral locations, the tongue is most frequently involved, followed by the floor of the mouth, buccal mucosa, and lips. The hard palate is an uncommon site, and schwannomas in pediatric patients are especially rare [2]. Due to its rarity and nonspecific clinical characteristics, this lesion is frequently misdiagnosed as a pleomorphic adenoma, a more prevalent benign palatal disorder.

Case Report

A 13-year-old male patient named Aditya presented with a palatal swelling that had been present for seven months. The lesion started off small and progressively enlarged over time. The patient reported tenderness when the area was palpated and experienced slight difficulty swallowing. There was no history of trauma, infection, or systemic disease. His medical, family, and medication histories were unremarkable, and he maintained a mixed diet without any harmful habits.

Upon general examination, the patient appeared healthy and was afebrile, showing no signs of systemic involvement such as pallor, icterus, cyanosis, lymphadenopathy, or pedal edema. Extraoral examination revealed no abnormalities. Intraorally, a single oval-shaped swelling was observed on the left posterior palate, spanning the area from teeth 24 to 28. The lesion measured around 4 × 3 cm, was sessile, firm in texture, non-compressible, and non-reducible. Mild tenderness was noted on palpation, along with localized inflammation and a whitish slough on the surface. There was no evidence of active bleeding or disruption of surrounding structures. Based on its clinical presentation, a provisional diagnosis of pleomorphic adenoma was considered.

The lesion was surgically excised under general anesthesia, and the specimen was submitted for histopathological analysis. Microscopic examination of H & E stained sections showed ulcerated stratified squamous keratinized epithelium along with connective tissue stroma. The stroma appeared collagenous with regions of degeneration and necrosis. An encapsulated mass displaying spindle cell proliferation arranged in Antoni A and Antoni B patterns was observed. Additionally, the stroma contained chronic inflammatory cells and minor salivary gland acini. These histological features were consistent with a diagnosis of schwannoma.

The postoperative recovery was smooth, with the patient exhibiting satisfactory healing. He was monitored over a six-month follow-up period, during which no evidence of recurrence was noted.

Discussion

Although schwannomas are well-documented in the head and neck region, intraoral involvement, particularly in the hard palate, is unusual. Most schwannomas occur between the ages of 20 and 50, with very few reported in children [3]. The indolent growth and lack of symptoms associated with these tumors can lead to delayed diagnosis, and their clinical similarity to more prevalent lesions like pleomorphic adenoma makes accurate identification challenging.

Histopathologically, schwannomas are characterized by a biphasic pattern of Antoni A and B areas. Antoni A regions are composed of compact spindle cells arranged in palisades, often forming Verocay bodies, whereas Antoni B areas are hypocellular and myxoid. Immunohistochemical staining for S-100 protein, a marker of neural crest-derived cells, aids in confirming the diagnosis [1,2].

Surgical excision continues to be the preferred treatment, and due to the encapsulated nature of these tumors, complete removal generally prevents recurrence. This case highlights the necessity of histopathological confirmation for all palatal swellings and emphasizes the need to consider schwannoma as a differential diagnosis, even in pediatric cases.

Conclusion

Palatal schwannomas are uncommon benign tumors that can clinically resemble more frequently encountered lesions such as pleomorphic adenomas. While rare in the pediatric population, schwannoma should be included in the differential diagnosis of any long-standing palatal mass. Complete surgical removal typically offers a favorable prognosis, as demonstrated in our patient who showed no signs of recurrence after six months.



Figure shows the schwannoma presented as a pedunculated mass in the hard palate with an ulcerated yellowish surface.

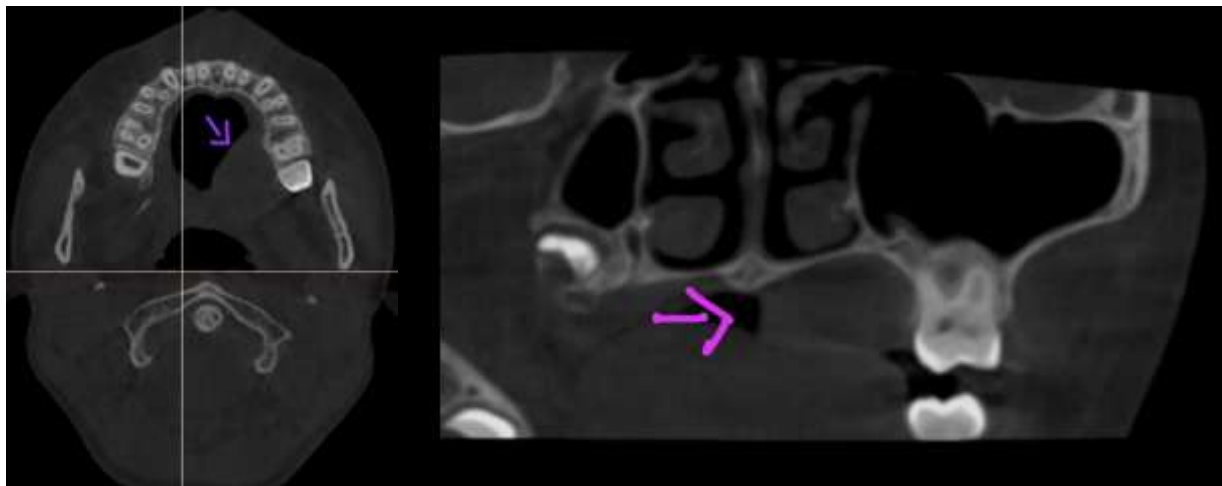


Figure shows an oval well circumscribed lesion noted in hard palate region. No cortical involvement appreciated.



Figure demonstrates the ligation of the greater palatine artery during the excision of the lesion.



Figure illustrates the site following the excision of the lesion.



Figure displays the biopsy sample collected after the excision of the lesion.

References

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