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Case Report: Intra Oral Schwannoma Of Palate.

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Abstract:
This is a case report of a female patient aged 50 years who visited the Dept. of oral and maxillofacial surgery with a chief complaint of a swelling in her left palatal side with no history of pain or similar symptoms. The swelling was seen since 4 to 5years and was slow growing in nature. After a detailed clinical evaluation, a clinical provisional diagnosis of pleomorphic adenoma was stated and the patient was advised for surgical excision and biopsy. Post surgical Histopathological biopsy report was stated as Schwannoma.

Keywords: *Peripheral Nerve Sheath Tumor, Perineurioma, Schwan cell tumor.*

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I. Introduction:

Schwannomas are benign, well-circumscribed tumors usually attached to peripheral nerves, consisting of a clonal population of Schwann cells, which often undergo cystic and degenerative change. Schwannomas are among the most common of the peripheral nerve sheath tumors, which also include neurofibromas, perineuriomas, granular cell tumors and malignant peripheral nerve sheath tumors. Schwannomas may occur spontaneously, or in the context of a familial tumor syndrome such as neurofibromatosis type 2 (NF2), schwannomatosis and Carney's complex. Schwannomas have a variety of morphological appearances, but they behave as World Health Organization (WHO) grade I tumors, and only very rarely undergo malignant transformation.[1]

Schwannoma is also named neurilemmoma, neurinoma and Schwann cell tumor, it is a rare benign neural tumor that arises from the neural sheath Schwann cells of the peripheral, cranial or autonomic nerves.[2] Its origin is most commonly associated with a nerve trunk, and usually affects the whole nerve throughout its course in the peripheral nervous system. The clinical symptoms depend on the nerve of origin.[3] Up to approximately 40% of head and neck tumors are schwannomas, and intraoral schwannomas constitute a mere 1%. The tongue is the commonest site of intraoral schwannomas.The schwannoma occurring centrally within the jaws is rare.[4]

II. CASE REPORT:

A 50-year female patient visited the Dental hospital with a complaint of asymptomatic intraoral swelling in the left palatal region which has been slow growing in nature for the past 4 to 5 years. [FIGURE 1]. Intraoral examination showed, the protruding mass was firm in consistency, non-mobile and was not tender. No family history of such intraoral finding was reported by the patient.

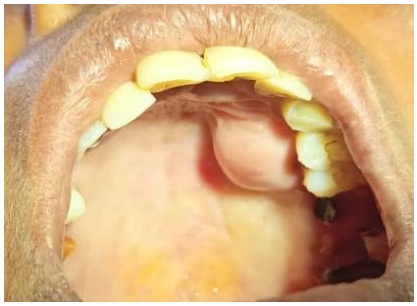
After obtaining patient's consent, pre surgical clinical and medical fitness, the patient was advised for surgical excision of the solitary intraoral mass. Intraoperatively, the attachment portion of origin of the nerve was not visible. There was associated carious tooth. Complete excision was done under 2% local anesthesia 1:80000 with adrenaline from the intraoral palatal site. Crevicular incision was placed on the left palatal side and an atraumatic fullthickness mucoperiosteal flap was elevated [Figure 2]. The lesion was located and blunt dissection was done to expose the same and excision of the lesion was done followed by suturing the elevated flap. The lesion was well circumscribed, pink in colour. The excised tissue was sent for histopathological evaluation.

Histopathological examination/ Microscopic examination [Figure 4] revealed a well-encapsulated lesion which was comprised of spindle shaped cells enclosed within fascicles and were arranged in two cellular patterns. The first pattern (Antoni A) showed closely arranged bundles of Schwann cells with spindle-shaped nuclei which were aligned in parallel rows, which formed a typical palisading pattern around Verocay bodies (acellular, amorphous, eosinophilic masses). The second pattern (Antoni B) showed disorganized, hypocellular areas of fusiform cells which were distributed in a random fashion. Based on the following features, a definite diagnosis

of an intraosseous schwannoma was made. 3 weeks post operatively [Figure 5], the healing was uneventful and patient was asymptomatic.

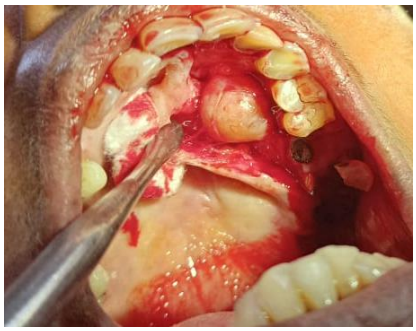
LIST OF FIGURES:

1.



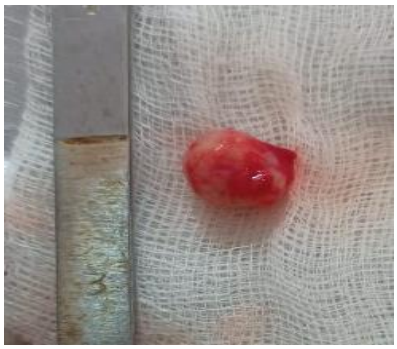
Intraoral, single protruding soft tissue mass, on left palatal side.

2.



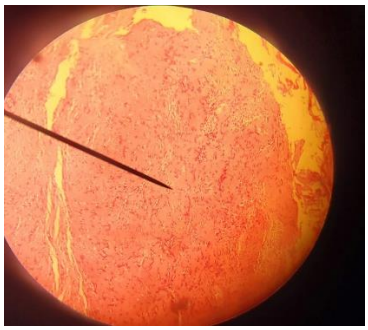
Full thickness flap elevated with exposure of lesion.

3.



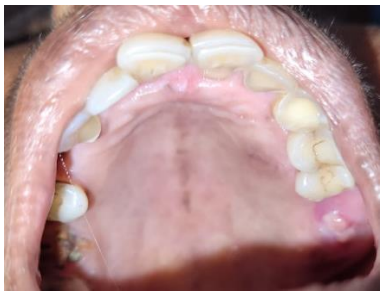
Complete excision of the lesion.

4.



Histopathologic slide showing Schwann cells and Antoni A type and Antoni B type cells pattern.

5.



3 Weeks postoperative with complete healing

III. DISCUSSION:

Studies have reported tongue to be the most common site intraorally, followed by palate, floor of mouth, buccal mucosa, gingiva, lips, and vestibular mucosa.[5] Schwannoma in oral cavity is infrequent with tongue being the most common intraoral site. Reports have stated that, asymptomatic and slowly growing schwannomas of the jaw commonly occur in the age range of 8-72 years, with an average age of about 34 years, with a female predilection[6]. This presented case shows similar case scenario, being asymptomatic and slow growing in a female patient aged 50 years.

Radiographically, intraosseous schwannomas present as unilocular radiolucency with a thin sclerotic border. They are sometimes associated with external root resorptions and cortical expansions.[7] In this case, no significant findings were seen radiographically, because there was no cortical bone perforation which had an intraosseous presentation.

As this lesion was well-encapsulated, the treatment of choice was excision. In this case, connection with the nerve could not be seen, but if the nerve of origin is visualized, an attempt should be made to separate it carefully, to preserve its function. As the recurrence and malignant transformation of schwannoma are usually rare and thus the prognosis is usually very good.[8]

IV. CONCLUSION:

Isadore Max Tarlov proposed this tumor to be of fibroblastic origin and coined the term "perineural fibroblastoma."[9] Other terminologies of schwannoma include neurinoma, neurilemmoma, and perineural fibroblastoma to be synonymous and distinguish this lesion from neurofibroma.[10]

The clinical differential diagnosis of schwannomas includes another benign tumor lesion such as fibroma, lipoma, neurofibroma, or salivary gland tumor. However, the histologic differential diagnosis includes other lesions of neural origin, such as neurofibroma, neuroma, and tumors of muscular or fibroblastic origin.

The microscopic features of conventional schwannoma include presence of Schwann cells; arrangement of cells in a compact (palisade fashion) i.e., Antoni A tissue and occasionally a loose texture of Antoni B tissue; Verocay body formation; presence of hyalinized and/or ecstatic vessels, often accompanied by hemosiderin deposits; and encapsulation of affected fascicles by residual collagenous perineurium.[11]

As in most of the cases, schwannomas are slow-growing tumors over the years sometimes showing symptoms such as paraesthesia. If left untreated, schwannomas may grow to large proportions, and may be associated with intralesional hemorrhage.

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