Schwannoma Of The Hard Palate: A Rare Case

A Dhupar, S Yadav, V Dhupar

Citation

A Dhupar, S Yadav, V Dhupar. *Schwannoma Of The Hard Palate: A Rare Case*. The Internet Journal of Head and Neck Surgery. 2009 Volume 4 Number 2.

Abstract

Schwannoma (Neurilemmoma) are benign tumors of ectodermal origin derived from schwann cells of the nerve sheath. They are slow growing, solitary and well encapsulated tumors. 25% to 48% of schwannomas are seen in the head and neck region. Only 1% of the schwannomas are seen intraorally. Tongue is the most commonest site of schwannoma. Here we present a rare case of schwannoma of the hard palate.

INTRODUCTION

The schwannoma is a rather common tumour derived from the Schwann cells. Neurites are not a component of the tumour as in the case of neurofibroma or other neural (benign) tumours. The differential diagnosis of benign neural tumours of the hard palate includes traumatic neuroma, schwannoma, neurofibroma and mucosal neuroma representing multiple endocrine and neoplasia syndrome type 3. In contrast, the traumatic neuroma is a non neoplastic reactive process of hyperplastic axons and schwann cells.

Other benign lesions originating in the oral cavity include minor salivary gland tumours, non-neoplastic lesions such as granular cell tumour, mucoceles and polyps. They must be differentiated from malignancies originating from epithelial, hematopoietic and mesenchymal tissues.

Malignancies are relatively rare in the hard palate except in those, with a habit of reverse smoking, where there is high incidence of carcinomas [6,14].

CASE REPORT

A 10 year old child of Goan origin visited the Department of oral and Maxillofacial surgery, Goa Dental College and Hospital, Goa, with a 5 month history of discomfort in swallowing, grabbled speech and a growth in the roof of his oral cavity. The swelling used to bleed occasionally while brushing and on having food. There were no complaints of pain and sudden increase in size.

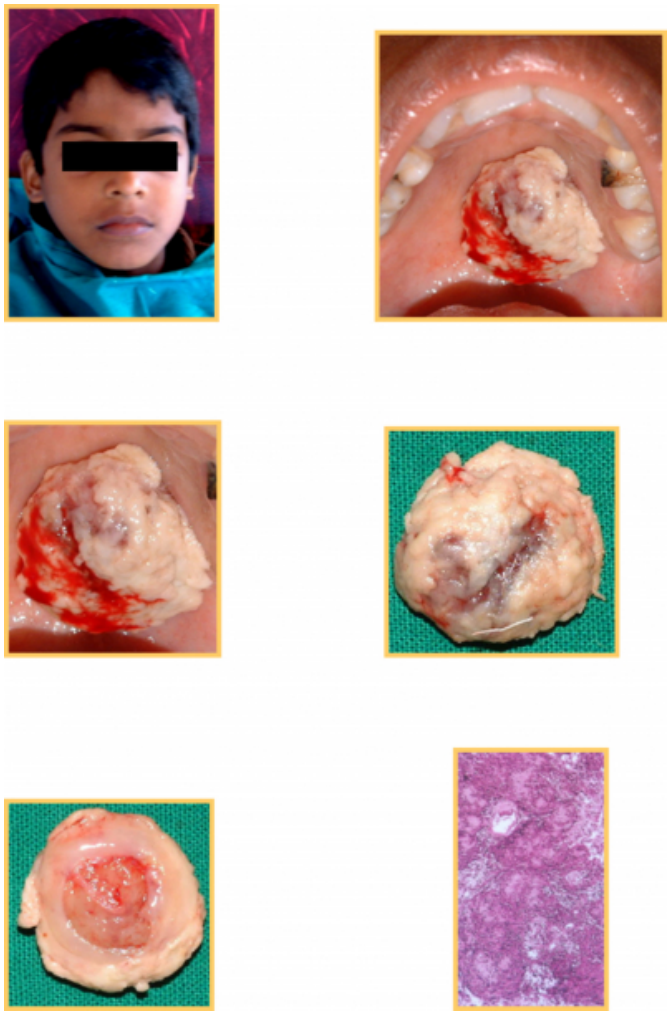
His past medical and dental history was not significant and with no such pathology in his family and relatives.

Physical examination revealed a 3x2 cm pink smooth, firm in consistency and well encapsulated mass encompassing the entire posterior surface of the hard palate just anterior to the junction of hard and soft palate, over the left greater palatine foramen region. There were no signs of ulceration and sloughing. There was no evidence of trismus and no involvement of nasal floor and septum. No cervical lymphadenopathy. Neurologically no cranial deficit was elicited. Wide local excison was planned. Routine investigations were within normal limits

A wide local excision was done and a custom made palatal splint was given to the patient. The wound healed by secondary intention and postoperative course was uneventful.

Histological sections stained with Haematoxylin and Eosin showed an encapsulated mass ulcerated in some areas and covered with dense microbial colonies. Excisional biopsy revealed a Schwannoma.

Figure 1



DISCUSSION

Schwannoma are slow growing lesions and usually of long duration at the time of presentation. An occasional does show a relatively rapid course. It usually presents between second and fourth decade of life [5,9,14] but cases during the first year of life are reported [1,2].

25% to 48% of schwannomas originate in the head and neck region [5,6,9]. The primary involvement of cranial nerve being the VIIIth nerve (acoustic schwannoma) [6,12] and the spinal nerve root within the cranial canal (11,12) and much less often in the V th nerve, usually in the region of gasserian ganglion [6,12] .

Despite neural origin, they usually are painless [6] causing pressure on adjacent nerves rather than nerve of origin [1] and may present with paraesthesia of the region of trigeminal sensory distribution.

20% -58% of head and neck schwannomas arise in the oral cavity [6,9] and schwannomas of peripheral position of the cranial nerve usually affect soft tissues of the head and neck. The tongue being the most common location [6,7,14] . A review of the literature reveals cases of schwannoma over the buccal mucosa, floor of the mouth, palate, lips and gingival [1,2,6] .

Schwannoma tend to appear as single slowly enlarging nodules which are associated with discomfort and occassionally with pain [6] . Rarely are they ulcerated reflecting the smooth,encapsulated nature of these tumours.

Histologically,Schwannomas are found to be encapsulated and composed of two distinct tissues,Antoni type A and Antoni type B.Antoni type A consists of spindle cells organized in palisaded sworls and waves.The palisading nuclei are arranged in rows,surrounding a central acellular eosinophilic zone known as Verocay body.Antoni B tissue consists of spindle cells haphazardly distributed in a light fibrillar matrix [4,6] .

Treatment mainly is surgical exicision .A wide local excision with negative pathologic margins gives a good prognosis. The palate is then allowed to reepithelialize by secondary intention.Reports of malignant schwannoma of the oral cavity are extremely rare [6,11] .

References

1. SHAFER ,HINE,LEVY .A text book of oral pathology,4th edition,W B Saunders Co 208-210
2. REGEZI AND SCIUBBA:oral pathology,clinical-pathologic correlations, 2nd edition W B Saunders Co 221-225
3. ENZINGER F M,WEISS S W (eds):soft tissue tumours(2nd edition)st. louis MO,C V MOSBY,pp717-757.
4. RUSSEL DS,ROBINSTEIN LJ(eds):(1989) Pathology of tumors of nervous system(eds).BALTIMORE,MD,WILLIAMS & WILKINS pp 541-548
5. LARRY L,CUNNINGHAM,MICHEAL WARNER:(2003) Schwannoima of vagus nerve first diagnosed as a parotid tumor. J Oral Maxillofac surg.61:141-144
6. ROY AMIR,KENNETH W ALTMAN et al:(2002) Neurilemmoma of hard palate.J Oral Maxillofacial Surgery.60:1069-1071
7. ANTONIOS DREVELENGAS,IOANNIS KALAITZOGLOU,NIKOLAOS LAZARIDIS:(1998) Sublingual hypoglossal neurilemmoma.Case report.Aust Dental Journal 43 (5) 311-314
8. ROBERT S REDMAN,JOHN G,GUCCION et al:(1996) Cellular schwannoma of the mandible:A case report with ultrastructural and immunohistochemical oberservation.J Oral Maxillofac surg 54:339-344
9. WILLIAMS H K,CARREL H,SILVESTER K et al: (1993) Neurilemmoma of head and neck.Br J Oral Maxillofac Surg31:32
10. SEPPALA MT,HALTIA MJJ:(1993) Spinal malignant

nerve sheath tumor or cellular schwnnoma?A striking difference in prognosis.J Neurosurg 79:528
11. GRATZ KW ,MAKEK M, SAILER HF : (1991) Malignant Melanotic schwannoma of oral cavity.Int.J Oral Maxillofac surg 20:236
12. NAGER G:(1984) Neurinomas of the trigeminal nerve.Am.j Otol 5:301
13. REDDY CR: (1974) Carcinoma of the hard palate in India in relation to reverse smoking of chuttas.J Natl Cancer Inst 53:615
14. CHERRIK H M ,EVERSOLE L R:(1971) Benign neural sheath neoplasm of oral cavity:report of 37 cases,Oral Surgery,Oral Med Oral Pathol 32:900

Author Information

Anita Dhupar
Professor, Dept. Oral & Maxillofacial Surgery, Govt. Dental College & Hospital

Sunil Yadav
Reader, Dept. Oral & Maxillofacial Surgery, Govt. Dental College & Hospital

Vikas Dhupar
Prof. & Head, Dept. Oral & Maxillofacial Surgery, Govt. Dental College & Hospital