PLEOMORPHIC ADENOMA OF THE UPPER LABIAL VESTIBULAR REGION: A CASE REPORT

Shukla Abhilasha,* N.N. Singh, Singh Sanjay,*****

Neoplasms of the salivary glands account for 3% of all tumor and less than 7% of cancers occurring in the head and neck region.Pleomorphic adenoma is the most common salivary gland neoplasm and the largest percentage involves the parotid gland. Hard or soft palate is the most common site of involvement of minor salivary glands followed by upper lip, buccal mucosa & retromolar region. Histologically the tumor reveals cystic spaces lined by glandular epithelium arranged in the form of ducts, chords & sheets with some myxoid areas. We report a case of Pleomorphic adenoma presented as the swelling of the upper, labial vestibular area in region of 13,14 & 15 .

Key words: pleomorphic, adenoma, myxoid, vestibular, myoepithelial.

INTRODUCTION

Pleomorphic adenoma is the most common benign tumor arising from major as well as minor salivary glands. The most common site of occurrence in the minor salivary glands is palate. Upper lip is the second most common site of involvement after palate though involvement of vestibular area in this region is not common. We report one such case involving right vestibular area of the upper lip region in a 35 year old male patient.

CASE REPORT

A 35years old male patient reported in the OPD of oral & maxillofacial surgery at Kothiwal Dental college Moradabad with a well circumscribed swelling arising from labial mucosa in region of right maxillary vestibular area in the region of 13,14 & 15. Swelling measured about 4cms X 3cms. It had smooth surface, firm in consistency & mildly tender on palpation with digital pressure.(Fig.1)

IOPAR showed no involvement of teeth in the area of swelling. Occipital view showed no involvement of right maxillary sinus.

After careful clinical & radiological examination , D/D of peripheral giant cell granuloma, giant cell fibroma & pleomorphic adenoma of the minor salivary gland was made.

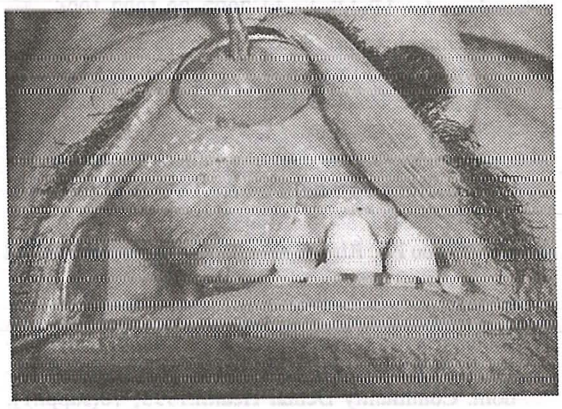


Figure 1: A well circumscribed swelling arising from the upper labial vestibular region.

Fitness for surgery under local anesthesia was ascertained by blood , urine & physical examination.

A vestibular mucosal incision from the right upper canine to distal of 1st molar was made lateral to the swelling. Blunt dissection along with the mucosal incision revealed the buldging out of tumor which was adherent to submucosal tissues and muscles. The tumor was carefully separated by blunt dissection & was delivered completely in one piece, with some muscle tissue attached to it. Overlying mucosa on the mesial aspect was also sacrificed.

**MDS IIIrd year student,*
***Associate Professor & PG Guide*
****Professor & Head, Dept of Oral & Maxillofacial Surgery, Kothiwal Dental College & Research Center Moradabad, U.P., India.*

Primary closure of the defect was achieved by undermining the vestibular mucosa. (Fig 2 & 3)

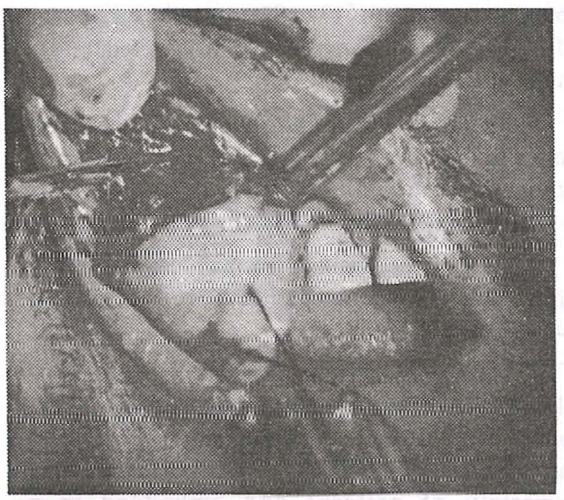


Figure 2: Blunt dissection along with mucosal incision revealed the buldging out of tumor which was adherent to the submucosal tissues & muscles.

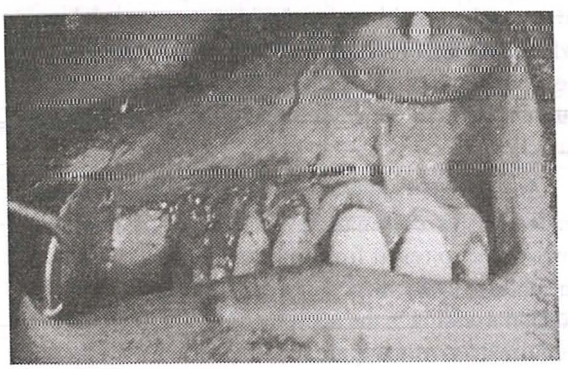


Figure3: Primary closure of the defect was achieved by undermining the vestibular mucosa.

Satifactory recovery occurred without any immediate or late complication.

The excised tumor mass was sent for histopathological examination (Fig 4 & 5).

One soft tissue bit received was fixed, processed, sectioned & stained with H&E, revealed presence of proliferating glandular epithelium arranged in the form of ducts , chords & sheets(fig 7). Ducts were filled

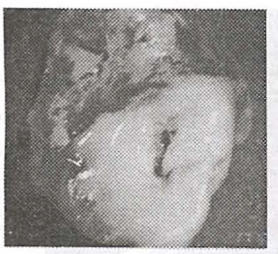


Figure 4: Gross tissue specimen

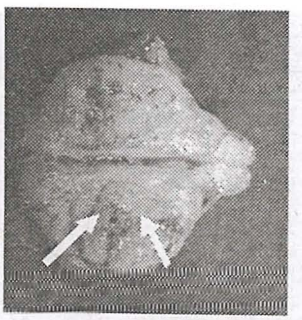


Figure 5: Grossed specimen showing lobulated masses

with eosinophillic material at places(fig 6). The supporting connective tissue stroma exhibited myxomatous areas at few places. Other areas exhibited dense collagenous bundles. Small foci of calcification & mineralization was also evident.(fig 8)

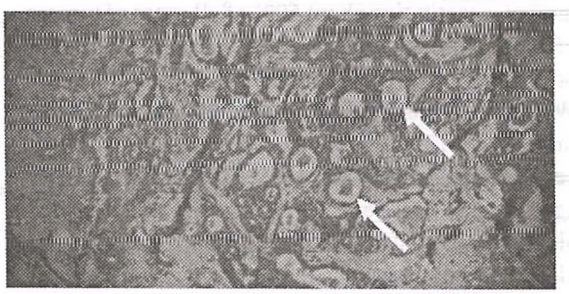


Figure 6: ducts like structures filled.

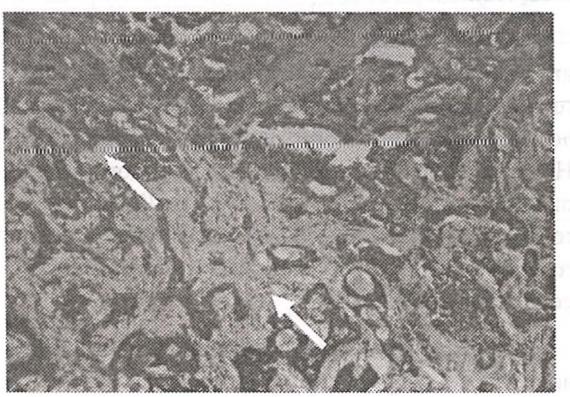


Figure 7: proliferating glandular epithelium with eosinophillic material (10X, H&E) arranged in the form of ducts, chords & sheets (10X, H&E).

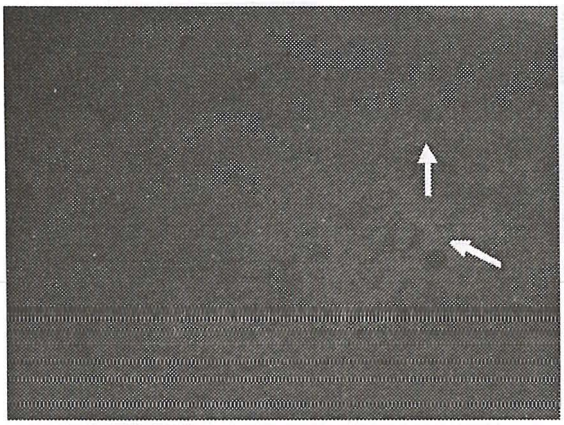


Figure 8: Small foci of calcification & mineralization was also evident.(10X, H&E).

DISCUSSION

PA is the most common of all salivary gland tumors, constituting about 50% of all cases of tumors of both major & minor salivary gland origin & approximately 90% of all benign salivary gland tumors. Women are affected more commonly than men at a ratio of 1.9:1 and within the age range of 30 to 50 years, although occurrence of the tumor among other age groups has been reported. Most intra-oral pleomorphic adenomas develop in the minor salivary glands of the palate(50%), followed by the glands in the upper lip(25%) , buccal mucosa(16%) & retromolar area(4%). [9]

Series of studies in the literature show 46–72% are benign salivary gland tumors. Benign salivary tumors are more common than malignant ones accessioned at most oral pathology laboratories. However, data from cancer centers show more malignant tumors than benign ones, with malignant ones representing up to 88%. This can be probably due to referrals of patients with malignant tumors to cancer centers for treatment. [2]

Pleomorphic adenoma, cystadenoma, canalicular adenoma, mucoepidermoid carcinoma, and adenoid cystic carcinoma are the common types of intra-oral minor salivary gland tumors in most large series of studies reported in the literature. [2]

Our case age presentation was at 35 yrs which is similar to the findings of Eveson and Cawson who found an age range of 13 to 87 years with an average of 46 years & *Wei-Yung Yih et al* who stated the age range of 30 to 50 years. [1,9]

Site of lesion was upper lip which is second most common site after palate & is well documented by *Spiro RH, Eveson JW, Cawson RA, Simon M.-Y. Lou.*& Waldron CA et al. [1, 7, 8, 10]

In our case the swelling was painless and slowly growing as was reported by *Wei-Yung Yih etal.* [9] & Junu Ojha et al. [4]

Heeneman H & Ming Jhao et al reported that Pleomorphic adenoma of salivary glands is characterized by its histomorphological diversity, possessing epithelial and myoepithelial elements arranged in a variety of patterns and embedded in a mucopolysaccharide stroma as was seen in our case. [3,6] The tumor is characterized by epithelial and modified myoepithelial elements intermingled with tissue of mucoid, myxoid or chondroid appearance. It has a wide spectrum of morphological patterns . Squamous cells, oncocytes, sebaceous cells, bone, adipose tissue and crystalline materials can be found in the tumor. [5]

Eveson JW, Cawson RA showed several areas of trabecular bone formation within areas of cartilage, considered to result from endochondral ossification In contrast, Lee et al. described a case of pleomorphic adenoma arising in the maxillary antrum in which the bone matrix was apparently deposited directly by metaplastic myoepithelial cells and did not result from endochondral ossification . Hamakawa et al. reported a bone-forming pleomorphic adenoma of the upper lip that appeared to result from direct deposition of osteoid tissue by modified myoepithelial cells as well as partial endochondral ossification. [1]

Simon M.-Y. Lou et al stated that many pleomorphic adenomas and myoepitheliomas arising in minor salivary glands have a capsule that is often thin or incomplete, but this lesion was enclosed in a well-defined fibrous capsule. There was no evidence of extension into or through the capsule. [8]

Treatment of pleomorphic adenoma has included simple excision, excision with a margin and the use of adjuvant radiotherapy. The tendency for pleomorphic adenoma to recur is well recognized and a five year follow-up period may be inadequate for these tumours as recurrences have presented up to 18 years after initial treatment. A 10–20 year follow-up period may be more suitable for both pleomorphic adenomas and myoepitheliomas. [8]

In conclusion, the clinical, histopathological & other findings of the case presented is in unison with the findings that are seen in the scientific literature.

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