Basal cell adenoma of sublingual salivary gland: A rare entity

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Abstract

Monomorphic adenoma or Basal cell adenoma (BCA) is a benign epithelial tumor of glandular origin. It has very unique histological characteristic and its diagnosis is mainly established by histological examination. Most common occurrence is in parotid gland and rarely reported in submandibular and sublingual salivary glands. In this case report, we are presenting a case of basal cell adenoma of sublingual gland.

Keywords: Basal cell adenoma, monomorphic adenoma, sublingual gland

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INTRODUCTION

Basal cell adenoma (BCA) is an unusual type of benign epithelial salivary gland tumor and classified as a type of monomorphic adenoma. It has unique histopathological characteristics. BCA accounts for only 1%—3% of all salivary gland tumors. It is included in 1991 World Health Organization classification, as a separate entity.^[1] Most frequent location of this tumor is parotid gland. About 80% of cases occur in parotid only.^[2] However, it can also involve upper lip, buccal mucosa, lower lip, palate and nasal septum.^[3,4] In this case report, we present a case of BCA of sublingual salivary gland.

CASE REPORT

A 64-year-old female patient reported to the Department of Dentistry, Shri Lal Bahudur Shastri Government Medical College and Hospital, Nerchowk at Mandi, Himachal Pradesh, with the chief complaint of a painless swelling in the mouth for 1 year.

Intraoral examination revealed moderately firm, well-defined, ovoid, solitary swelling in the left sublingual region measuring approximately 3 cm × 2 cm [Figure 1]. Swelling was mobile on bimanual palpation.

Occlusal view revealed no sign of erosion and no bony destruction of adjacent structures. Excisional biopsy was done and the excised specimen was sent for histopathological examination. The H&E-stained sections at ×4 showed a well-circumscribed tumor mass [Figure 2]. Tumor cells were arranged in small clusters, cords and trabeculae and at places forming microglandular patterns [Figure 3]. Cells with uniform round to oval nuclei with scanty cytoplasm, bland nuclear chromatin with inconspicuous nucleoli were seen [Figure 4]. Intervening stroma showed inflammatory cells, blood capillaries and few areas of hemorrhage [Figure 5]. The histopathological features were suggestive of BCA.

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DISCUSSION

BCA has a low incidence, i.e., 1%–3% of all salivary gland tumors, and peak incidence is generally in the seventh decade of life with marked female predilection. ^[5] Clinical presentation of BCA is a slow-growing, asymptomatic and freely movable swelling. In general, such tumors do not exceed size of 3 cm. ^[4]

The diagnosis of BCA must be confirmed only by histopathological examination. It is a benign epithelial tumor having cells derived from glandular epithelium and lack the characteristic myxochondroid matrix found in pleomorphic adenoma. [1,6]

On the basis of morphological pattern, BCAs are classified into four types: solid, trabecular, tubular and membranous. Solid variant is the most common one.^[1] In our case, tumor had predominant trabecular pattern with hyperchromatic chromatin and scanty stroma.



Figure 1: Clinical location of the lesion in the sublingual region

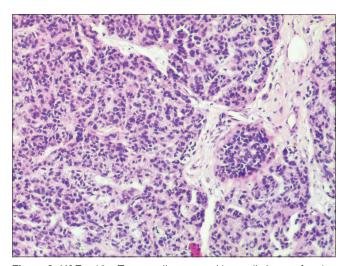


Figure 3: H&E, ×10 – Tumor cells arranged in small clusters forming microglandular patterns

Diagnosis of BCA is of clinical importance as it affects treatment and prognosis of the lesion. These tumors are amenable for conservative treatment such as local excision or only superficial removal of affected gland.

CONCLUSION

BCA of sublingual salivary gland is a rare occurrence. In this case, differential diagnosis was pleomorphic adenoma and adenoid cystic carcinoma. Histopathological examination of the lesion after excisional biopsy was of utmost importance for diagnosis of the tumor as it has prognostic implications.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal.

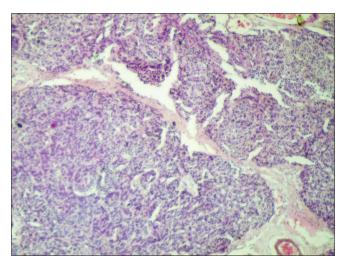


Figure 2: H&E, ×4 – Stained sections showed circumscribed tumor

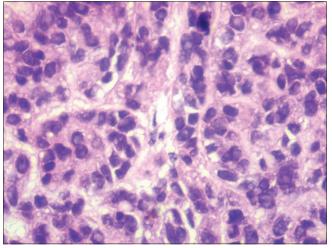


Figure 4: H&E, ×40 – Cells with uniform round to oval nuclei with scanty cytoplasm and inconspicuous nucleoli

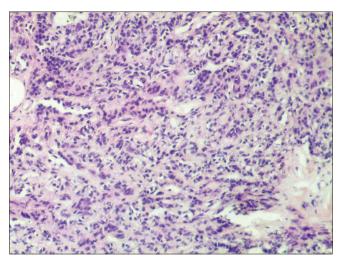


Figure 5: H &E, \times 10 – Stroma with inflammatory cells, blood capillaries and areas of hemorrhage

The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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