

CASE REPORT

CANALICULAR ADENOMA OF SALIVARY GLAND

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HOW TO CITE THIS ARTICLE:

D. Prem Charles, P. Narmadha, Rehana Tippoo, U. Manohar, P. Viswanathan. "Canalicular adenoma of salivary gland". Journal of Evolution of Medical and Dental Sciences 2013; Vol2, Issue 32, August 12; Page: 6097-6099.

ABSTRACT: Canalicular adenoma is a benign neoplasm of salivary gland. We are presenting a case in a 19 year old lady as a swelling in the floor of mouth which presents as a painful lesion. Histopathologically it is a single lobular lesion which shows luminal columnar cells arranged in canalicular pattern. No evidence of malignant transformation and the mode of presentation signify this publication.

KEY WORDS: Canalicular adenoma, Salivary gland, floor of the mouth.

INTRODUCTION: Canalicular adenoma is an uncommon benign salivary gland tumor almost exclusively occurring in intra-oral glands. The upper lip is the most common site followed by buccal mucosa. Peak incidence of occurrence is sixth and seventh decade. Among the intraoral minor salivary gland tumors it constitute 5.6% to 11.7% of all cases studied.^{1, 2} Most canalicular adenomas are circumscribed and encapsulated but some are multinodular and partially encapsulated. A network of branching and interconnecting cords of columnar epithelium lies within a loose stroma.

CASE HISTORY: A 19 year old female came to the ENT outpatient department with complaints of swelling in the floor of the mouth for a period of 1 year. Swelling gradually increased in size and was painful for the past 2 weeks. He had difficulty in mastication and had decreased taste sensation for 2 weeks. Swelling over the floor of the mouth was measuring 2 x 2cms, firm and mobile. The lesion was spherical in shape. The outer surface of the swelling was congested with a small ulcer.

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Macroscopy reveals single grey white soft tissue piece measuring 2 x 1cm. Microscopy shows a circumscribed tumor (Fig: 3) beneath the oral mucosa (Fig: 4) composed of hyperchromatic low cuboidal to low columnar cells (Fig: 2). These cells are arranged in two rows to form glandular units; cells are arranged in cords (Fig: 1) and tend to be branched. Stroma is loose and edematous. Thin walled blood vessels are also observed.

FEATURES ARE CONSISTENT WITH CANALICULAR ADENOMA OF SALIVARY GLAND

Canalicular adenomas are benign neoplasms of salivary gland. 85% of it occurs in upper lip and adjacent mucosa and it is rare in major salivary glands. It represents about 4 – 6% of minor salivary gland tumors. They are rarely larger than 3cm and are generally asymptomatic and slow growing.

Canalicular adenomas are circumscribed and encapsulated lesions. A network of branching and interconnecting cords of columnar epithelium lie within a loose stroma in which capillaries are often conspicuous but there is little collagen and fibroblasts. The cords of columnar cells are in

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double rows in which the proximity of the two rows along their course from tightly abutted or sometimes widely separated.

Small ducts or cysts without connection to adjacent epithelium result from cross sectioned cords. The cells are uniform with round to elliptical nuclei and amphophilic to eosinophilic cytoplasm. In some tumors aggregates of basaloid cells are located between rows of columnar cells. Myoepithelial cells differentiation is not evident.^{3,4}

Differential diagnoses are as follows:

- 1) BASAL CELL ADENOMA⁵ Marked preference for upper lip. Absence of Canalicular architecture and columnar cells.
- 2) ADENOID CYSTIC CARCINOMA⁶ Cells are not columnar and do not form canaliculi. Recurrence is uncommon and probably related to multifocal lesion.

MICROSCOPIC PICTURES : H & E SECTIONS

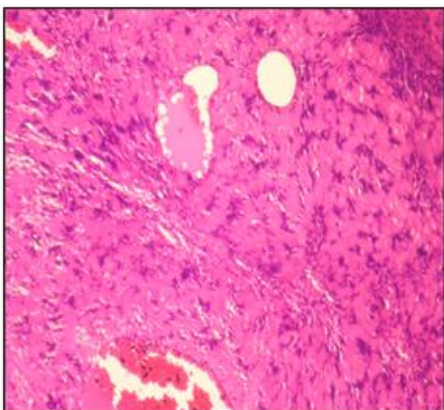


Fig 1: H&E Stained Magnification 10X
Tumor cells arranged in the form of cords and sheets along with congestion of blood vessels. Tumor cells tend to form glandular units

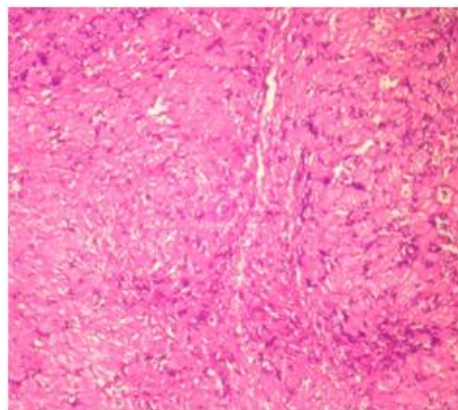


Fig 2: H&E stained Magnification 40X
Tumor cells arranged in cords showing hyperchromatic low cuboidal to columnar cells

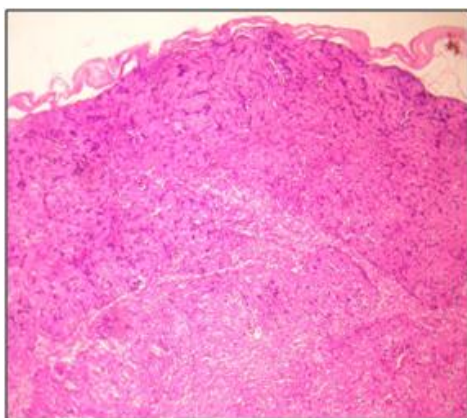


Fig 3: H&E stained Magnification 10X
Tumor shows encapsulation

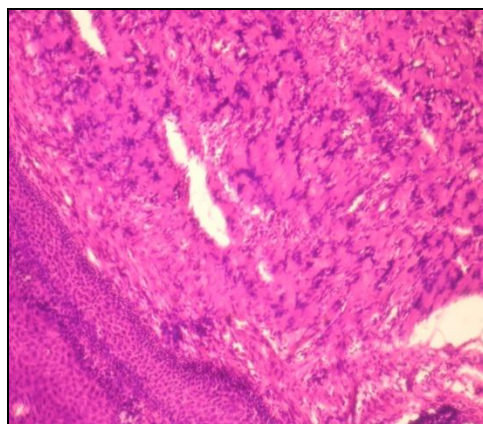


Fig 4: H&E stained Magnification 40X
Shows tumor originating from submucosa

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Date of Submission: 26/07/2013.

Date of Peer Review: 27/07/2013.

Date of Acceptance: 06/08/2013.

Date of Publishing: 12/08/2013.