IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 18, Issue 5 Ser. 10 (May. 2019), PP 40-44
www.iosrjournals.org

Adenoid Cystic Carcinoma-a case report

Asif Razdan T K[1], Nishath Khanum[2], Mahesh M S[3], Santosh Kanwar[4]
[1]*Postgraduate student, Department of Oral Medicine and Radiology, Farooqia Dental College and Hospital Mysuru, Karnataka, India.*
[2]*Senior lecturer, Department of Oral Medicine and Radiology, Farooqia Dental College and Hospital, Mysuru, Karnataka, India.*
[3]*Head of Department, Department of Oral Medicine and Radiology, Farooqia Dental College and Hospital, Mysuru, Karnataka, India.*
[4]*Senior lecturer, Department of Oral Medicine and Radiology, Farooqia Dental College and Hospital, Mysuru, Karnataka, India.*
Corresponding Author: Asif Razdan T K

Abstract: *Adenoid cystic carcinoma (ACC) is the one of the most common malignancy of the salivary gland. It is considered as one of the intermediate grade of salivary gland neoplasms. ACC shows slow growth with high propensity for spread through perineural sheath, local recurrence and distant metastatic deposits involving bones, lung, and liver. Here, reporting a case of ACC in 60 yr male patient involving the left posterolateral part of the hard palate. Taking consideration of clinical presentation, past history of maxillary sinus drainage provisionally it was diagnosed as Mucous retention cyst wrt 24,25,26. The sections under H&E suggested that, it is adenoid cystic carcinoma. The section also shows the infiltration to the adjacent bone.*
Key-words: *Maxillary sinus, Adenoid cystic carcinoma.*

Date of Submission: 07-05-2019 Date of acceptance: 23-05-2019

I. Introduction

Adenoid cystic carcinoma is a malignant neoplasm and one of the common and best recognized salivary gland malignancies.[1] This tumor was first described by Billroth as 'cylindroma' in 1859.[1-10] The term 'adenoid cystic carcinoma' was introduced by Ewing in 1954.[1,9] It is an unremettingtumor having a great tendency to recurr and eventual distant metastases.[9,10] Its clinical findings include small size and slow growth, it exhibits extensive subclinical invasion and marked ability for early metastasis, the factors which make the prognosis of the neoplasm questionable when present.[1,5,9] Among all adenoid cystic carcinomas, 50% occur in intraoral sites, with definite predilection for the posterolateral portion of the hard palate.[1]

The tumor exhibits a distinct cribriform histomorphology previously described as Swiss Cheese or Sieve like but this terminology has failed to express the wide spectrum of histological diversity that may be seen.[2,7] Current treatment recommends , complete surgical resection and postoperative radiation therapy. Tumor recurrence rates vary in the literature but reportedly can be as high as 42%.

Although the prognosis is poor, the course of disease is often indolent and hence survival rate is high. The aim of the present case reported here, is to focus on the importance of detailed investigations.[2]

II. Case Presentation:

A 90 years old female patient visited the department of Oral Medicine and Radiology, Farooqia Dental college and hospital, Mysuru, with the chief complaint of swelling on the palate on the left side since approximately 1 months. The history revealed that the swelling had started insidiously and had steadily increased in size since its onset. The swelling was associated with dull and continuous pain which started 20 days ago and it was not associated with discharge of any sort. Medical, surgical, dental, family and personal histories were not noteworthy. There were no abnormalities detected on general physical examination. There were no abnormal findings on Extra oral examination.

Intraoral examination revealed a solitary swelling, involving the left anterolateral region of the hard palate, measuring approximately 1½ × 1 cm, extending anteroposteriorly 1 cm from the incisive papilla to 25, and lateromedially, from the alveolar mucosa of 24,25 towards the midpalatineraphae. The surface of the swelling was smooth and the overlying mucosa was intact and normal in colour. On palpation, the swelling was tender and firm in consistency. No regional lymphadenopathy was found. Clinical differential diagnosis included a benign or a low grade malignant neoplasm of minor salivary glands, reactive/inflammatory condition

of minor salivary glands, salivary, a malignant growth of the maxillary sinus, benign mesenchymal neoplasm and much less likely a slow-growing malignant mesenchymal neoplasm.

Intra-oral periapical and occlusal radiographs revealed diffuse, hazy, irregular radiolucency in 24, 25 region. OPG revealed a malignant natured expansileantrochoanal polyp with bone destruction in posterolateral wall, medial wall and alveolar recess. Radiographic findings were in the favour of malignant lesion of maxillary sinus.

Incisional biopsy was performed for the histopathological diagnosis. The hematoxylin and eosin stained sections showed uniform cells arranged in cord like pattern, with deeply stained nuclei and with round giving the entire structure a typical "swiss-cheeze" appearance. The histopathological impression was that of an adenoid cystic carcinoma of cribriform pattern.

III. Discussion

among all the salivary glands incidence of intraoral minor salivary gland neoplasms ranges from 9-23%.[1] Among all these 50% tumors are malignant,42-54% occur on the palate.[1,2] Of all the palatal salivary neoplasms Adenoid cystic carcinoma occurs on the palate with the frequency of 8-15%.[1,2,4]

The term 'adenoid cystic carcinoma' was introduced by Ewing (Foote and Frazell) in 1954. Billroth in 1859first described ACC under the name "Cylindroma", for its epithelial and connective tissue elements formed a system of intertwining cylinders.[1,5] The term 'basalioma' was coined by Krompecher in 19081, who contemplated this type of tumor to be of homologous nature to the basal cell growths of the skin.[1]

Adenoid cystic carcinoma may occur at any age, although in most cases the patients are middle aged or over.[8]In present case patient was 90year old female.[1] Females are more prone to ACC when compared to males. Often 50% of ACC occur within the minor salivary glands although it can occur in any salivary gland site.[1,3,5] The other tumors are found mainly in the parotid and submandibular glands and less frequently in sublingual glands.[1,4] It usually appears as a slowly growing mass. Pain is a commonnest and important finding, having an occasional occurrence in the early course of the disease even before a noticeable swelling.[1,5]Facial nerve paralysis may seldom develop with parotid tumors. Intraoral (oral and oropharyngeal) adenoid cystic carcinomas are unconventinal and signalized by slow evolution, protracted clinical course, multiple and/or delayed recurrences and late distant metastasis.[1,3]

Tumors arising in the palate or maxillary sinus may manifest radiographic evidence of bone destruction.[1,5] In a study conducted by Buchner A et al, the relative frequency of intraoral minor salivary gland tumors was 0.4%, among these 41% were malignant. Among these malignant neoplasms, commonest being mucoepidermoid carcinoma (21.8%) followed by polymorphous low grade adenocarcinoma (7.1%), Adenoid cystic carcinoma was found to be third most common (6.3%).[1] Because of the long natural history of the disease,recurrence are treated aggresively with surgery, radiotherapy or both.[6] Most ACC's arising in major salivary galnd are treated surgically with addition of adjunctive radiotherapy. Parotid ACC should be treated by preservation of facial nerve if not paralysed preoperatively and not involved intimately by tumours at the site of surgery followed by postoperative radiotherapy.Submandibular ACC should be treated by a supraomohyoid dissection followed by a postoperative radiotherapy.ACC of minor salivary glands is treated by local radical excision and postoperative radiotherapy.Chemotherapy is currently seeking a role in management of advanced and metastatic salivary gland tumours.[9]

IV. Conclusion

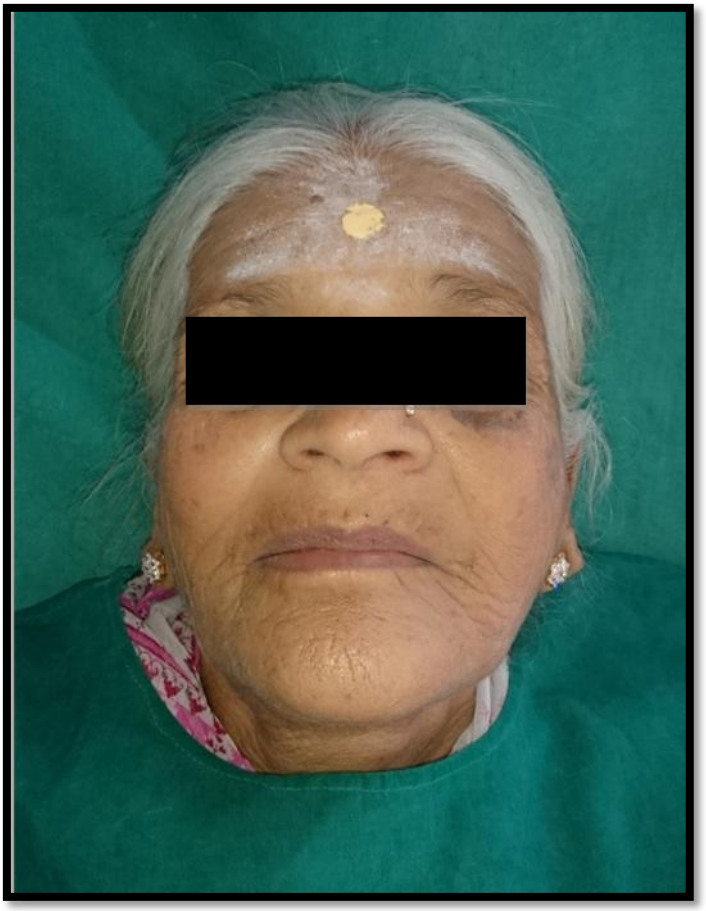
Early diagnosis of any disease has good prognosis. Usually minor salivary gland carcinomas are diagnosed at later stages leading to poor prognosis. Early intervention of the palate region when the patient reported her symptom previously should have been made and this may avoid the present progression of the lesion significantly. This shows the importance of systematic investigatory procedures which is usually bypassed in our routine practice.Advances in therapeutic modalities have not had a significant impact on the natural history of ACC of head and neck.The preffered treatment for majority of patients is radicular surgery with poatoperative radiotherapy.[10]

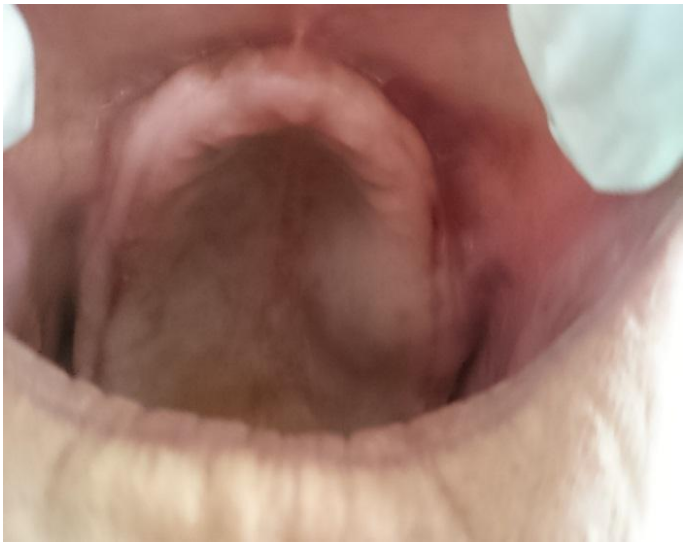
References

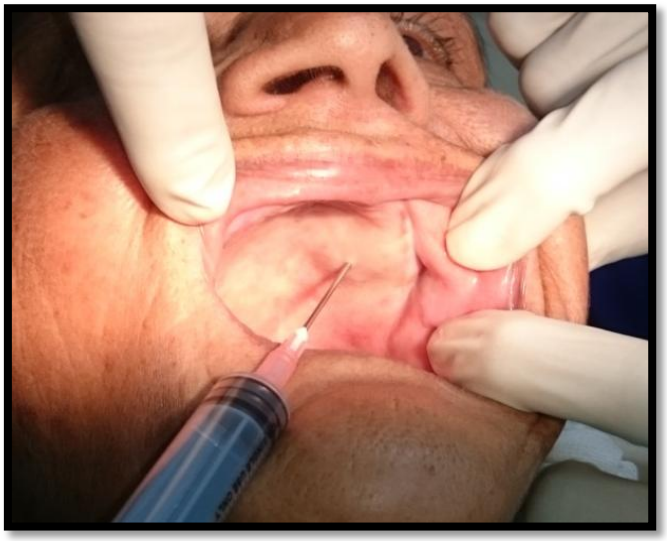
[1]. Mahajan A, Kulkarni M, Parekh M, Khan M, Shah A, Gabhane M. Adenoid Cystic Carcinoma Of Hard Palate: A Case Report.OMPJ: Vol 2 (2011); 127-131.
[2]. Tripathi P, Nahar P, Ahemad BN. Adenoid cystic carcinoma of the palate;a case report. JCST:Vol2(2010); 160-162.
[3]. Mitra S,Kundu S,Pattari SK,Ghosal AG. Metastatic pleural effusion; a rare presentation of salivary gland adenoid cystic carcinoma; A Case Report. The Indian Journal of Chest Diseases & Allied Sciences. Vol(53), 2011; 106-110.
[4]. Mehta ND, Parikh JS. Adenoid cystic carcinoma of the palate: A Case Report. JNSBM. Vol4(2013); 249-252.
[5]. Sonune S, Tupsakhare S, Patil K. Adenoid cystic Carcinoma of the hard palate- A Case Report. JOOO. 2015, 1(3); 142-145.
[6]. W I Marsh, MS Allen. Adenoid Cystic Carcinoma A Case Report. American cancer society.Vol43(1979); 1463-1475.
[7]. P A Pzanto, M A Luna, M E Tortoledo. White Histologic Grading Of Adenoid Cystic Carcinoma of the Salivary Glands- A Case Report. American cancer society.Vol54(1984); 1062-1069.
[8]. J Jasso, R Malhotra. Adenoid Cystic Carcinoma - A case Report. APLM. Vol 135; 511-515.
[9]. P J Bradely. Adenoid Cystic Carcinoma Of The Head And Neck.Arch Pathol Lab Med. Vol 135 (2011); 127-132.

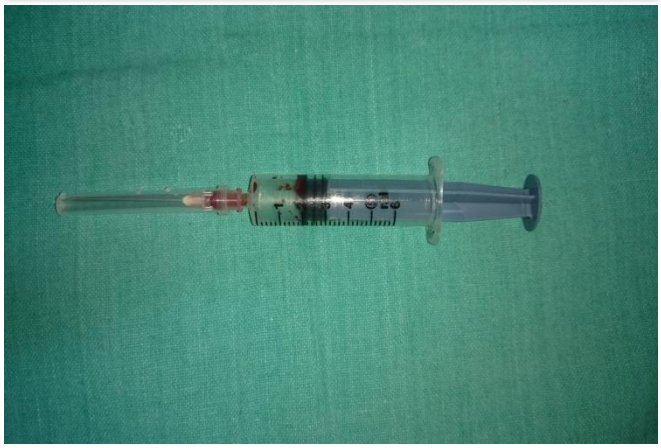
[10]. R. B. Lucas, Pathology of tumors of the oral tissues, fourth edition, page: 330-35.
[11]. Neville, Damm, Allen, Bouquot; Oral and Maxillofacial Pathology, second edition, page: 426-428.
[12]. Robert E M, Diane S. Oral and Maxillofacial Pathology, A rational for diagnosis and management; 550-553.

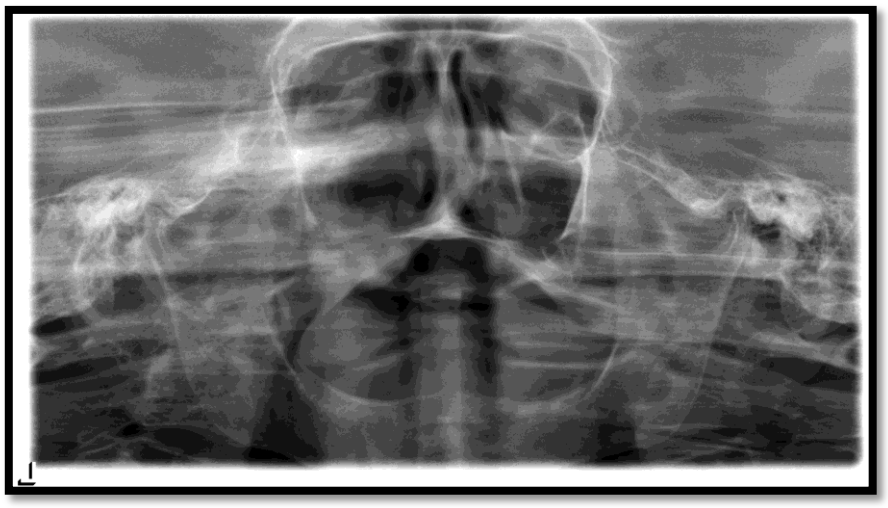
PHOTOGRAPHS

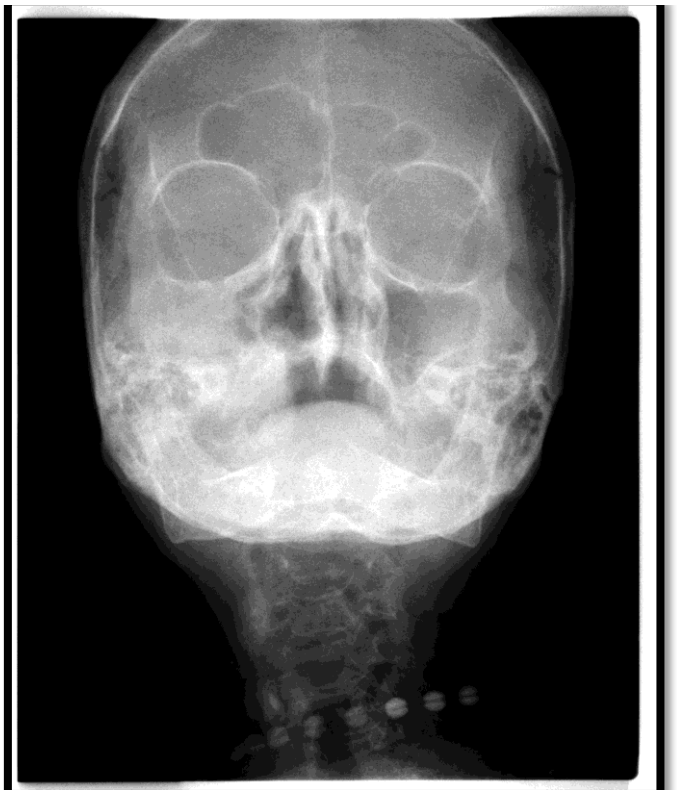


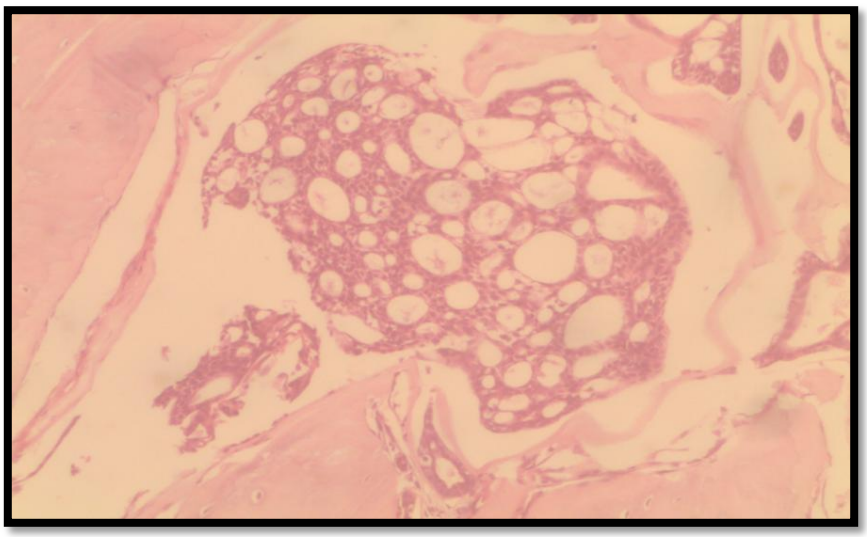












Asif Razdan T K." Adenoid Cystic Carcinoma-a case report." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 5, 2019, pp 40-44.