

Case Report Peripheral-Oral Mucoepidermoid Carcinoma In An Old Female

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Abstract: Salivary gland tumors alternately neoplasm is a development arising from tissue for gland origin. Mucoepidermoid carcinoma is a malignant epithelial tumor that is made from Different proportions from mucous, epidermoid (e. g., squamous), intermediate, columnar, and clear cells Also regularly shows unmistakable cystic Growth. It is those the vast majority malignant neoplasm detected in the in the major and minor salivary glands. A large portion salivary gland tumors emerging from significant organs display as gradually enlarging growths, nontender and painless. The initial diagnosis may be built upon that physical examination and the location of the mass within or developed from either major or minor salivary glands. Excisional biopsy is a critical diagnostic and planning tool. The present report describes a case of high-grade mucoepidermoid carcinoma of right mandibular buccal mucosa in 56year old female.

Keywords: Salivary gland tumor; malignant epithelial tumor; enlarging growths; mucoepidermoid carcinoma.

I. Introduction

Salivary gland tumors alternately neoplasm is a tumor in the tissue of salivary gland origin. Salivary gland tumors might emerge from huge numbers of the different cell types forming the glandular and ductile systems well as a few of the supporting structures but also some of the supporting structures that do not arise in saliva secretion or transport. These growths might be benign or malignant.

Neoplasms of the major salivary glands consist minor part head and neck neoplasms. Less 2% would malignant. The greater part neoplasms include in parotid 75%, 0. 8% for sublingual glands. Remainder equally distributed between the submandibular gland and minor salivary gland. Incidence of malignant neoplasms increases after 4th s and 5th decades s and peaks 65—75 years .Benign neoplasms display in young age than malignant neoplasm. Malignant neoplasms occur most often in men. (Chandak, Chandak, & Rawlani, 2015) .

Mucoepidermoid carcinoma may be is a malignant epithelial tumor that is created about Different proportions of cells such as, epidermoid intermediate, columnar, and clear cells Also regular reveal conspicuous cystic development. It is the most frequently malignant neoplasm detected in the major and minor salivary glands . Mucoepidermoid carcinoma display 29% will 34% for malignant tumors arise in both a minor &major salivary gland. With respect to malignant tumors of the minor salivary glands, mucoepidermoid carcinoma reveals to a high predilection to the upper lip. In an AFIP Audit of citizen cases, the simply period of patients might have been 47 years, with an age range of 8 years to 92 years. Former presentation with ionizing radiation seems to significantly build those risk of developing malignant tumor of the major salivary glands, especially mucoepidermoid carcinoma (Chandak et al., 2015) .

II. Case Report

A 56-year-old female patient came to the outpatient department with the complaints of swelling since 8 months which gradually increasing in size , on and off pain since 3 months , difficulty in food intake and chewing. On examination, a swelling of size 2cm diameter was noted intra-orally corresponding to the right mandibular buccal mucosa. Mucosa over the swelling is normal without any ulceration or discoloration (Figure 1). Patient advised undergoing routine laboratory investigations and imaging . All routine laboratory investigations were normal; x-ray was Negative(Figure 2)



Fig-1: Clinical picture showing intra-oral swelling



(Figure 2):x-ray was Negative

Patient posted for surgery and the excision of the swelling done and sent for Histopathological examination (HPE). Grossly, we received a soft tissue mass measuring of 2cm diameter, which is well circumscribed. The cut section shows solid and very few tiny cystic areas. Representative areas were sectioned and processed for microscopic examination.

Microscopy:

Histopathology Histopathological examination of H&E stained sections revealed masses of intermediate cells with few masses of epidermoid and mucous cells .clear cells were also found in large masses. The connective tissue stroma was infiltrated by chronic inflammatory cells .minor salivary glands also observed(.figure 3,4,5&6).

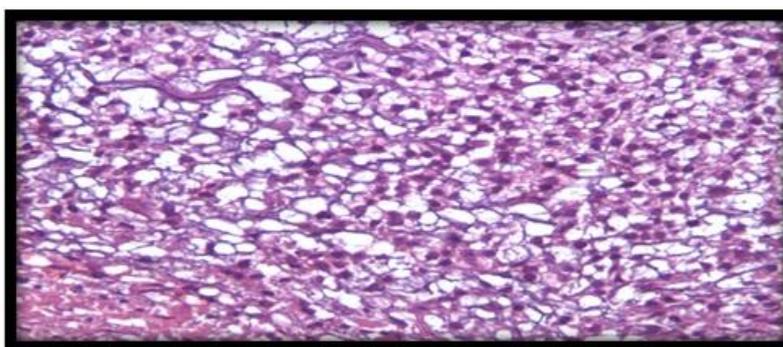


Fig-3: High power view showing the sheet of squamous cells with focal mucous producing cells.

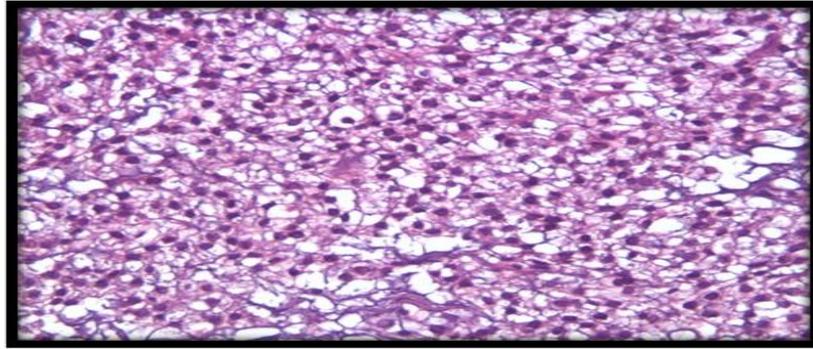


Fig-4: epidermoid cells& clear cells

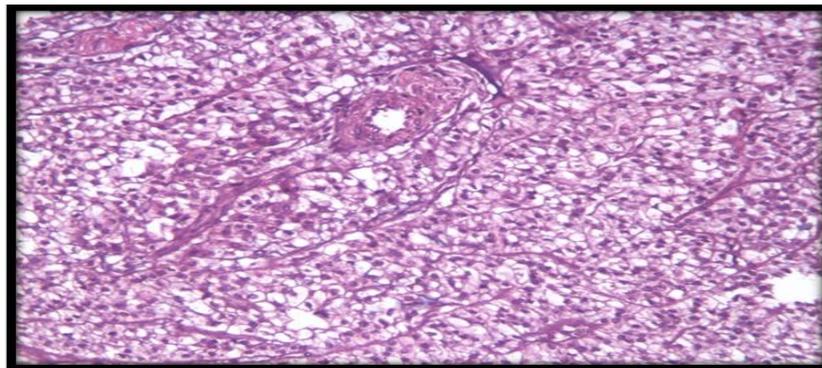


Fig-5: many of clear cells in mucoepidermoid carcinoma.

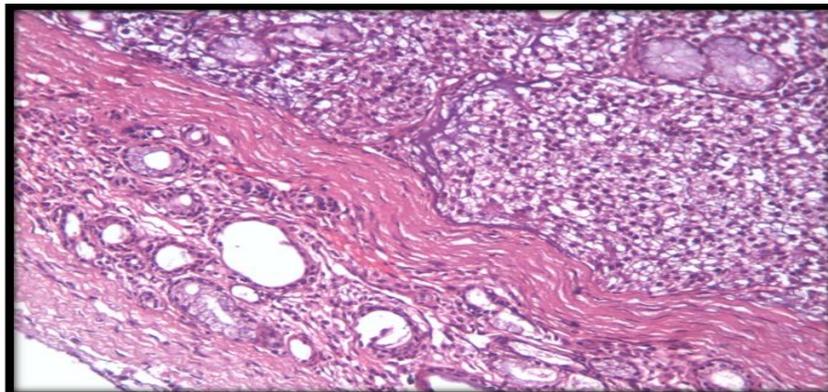


Fig-6: Normal duct structure with collagen septa and epidermoid and mucocyte

III. Discussion

Salivary gland tumors represent 5% for head What's more neck neoplasm with pleomorphic adenoma Likewise those A large portion as a relatable point neoplasm What's more Mucoepidermoid carcinoma continuously those The greater part basic dangerous tumor. Tumors of the minor salivary gland represent 10–15% for know salivary gland neoplasms. The vast majority normal protestation will be an easy swelling in the mouth (60%), for side effects Hosting been an exhibit to more than 12 months. Those The majority normal locales for tumors of minor salivary gland origin would the palate, buccal mucosa, Also upper lip, which accounts for more than 75% of cases . The palate is the most common site for all tumors of minor salivary gland origin (55%) and more than 60% of these are malignant. MEC was first described by Volkmann in 1895, which was further elaborated upon by Stewart in 1945 as a mucoepidermoid tumor. The naming of the tumor as MEC goes to Foot and Frazell (1953). which might have been further expounded upon by Stewart clinched alongside 1945 Likewise mucoepidermoid tumor. Those kudos of naming those tumor Concerning illustration MEC dives should foot What's more Frazell (1953). The MEC can be involved with major salivary glands, minor salivary glands, and can also present as an intraosseous tumor frequently called as central MEC. The common age group for the occurrence of MEC in man and women is approximate 43 years. In general female predilection has been detected usually . The gender difference is highly prominent in patients with tumors of the tongue and retromolar area. The females outnumber the males by 76- 80%. The 46% of MEC's detecting intra- orally in the

minor salivary glands arise in a variety of location including ectopic salivary gland tissue. Most of the cases are frequently observe to be associated with palate, cheek, mandible, lip, and tongue. The lesser number of MECs is associated with a retromolar area, oropharynx, and ectopic salivary gland. The MEC in minor salivary glands is generally slowly developing lesions which are asymptomatic with a history extending from 1½ to 10years. Most lesions detect as small solid masses, or as a soft tissue mass with granular or papillary surfaces and ulcerated lesions. Some of the MEC present as bluish or red-purple, fluctuant, smooth surfaced mass, which occurs very similar to mucocele. MEC arise is thought from pluripotent reserve cells of the excretory ducts of the salivary gland that have the potential to differentiate into epidermoid, columnar, mucous cells, clear cells. MEC is documented to manifest variable biologic aggressiveness, basically expressing correlation with its histological criteria. Histologically, the mucoepidermoid carcinoma is characterized by the presence of mucous, squamous and intermediate cells (with epidermoid metaplasia) . The type will be cystic or cystic papillary cystic or cystic papillary .They may be classified into low, intermediate or high malignancy grade based on five parameters: the proportion of cystic and solid elements, neural invasion detection, anaplasia ,mitotic rate& necrosis . In spite of having been histologically classified, it may clinically present with an indolent behavior. In our case, the site was relatively uncommon; occurring in a young patient and histologically the mucoepidermoid carcinoma is characterized by the presence of mucous, squamous and intermediate cells (with epidermoid metaplasia) .The pattern is cystic or cystic papillary (**Shah. N, Mahajan, Patel, Shah R & Shah S, 2015**). They may be classified into low, intermediate or high malignancy grade based on five parameters: a proportion of cystic and solid elements, neural invasion , necrosis, anaplasia and mitotic rate . In spite of having been histologically classified, it may clinically present with an indolent behavior. In our case, site was relatively uncommon; occurring in a young patient and histologically it is of low-grade malignancy (Kumar et al., 2014)

IV. Conclusion

Most mucoepidermoid carcinomas emerge in the parotid organs. They create less often in the submandibular gland alternately done minor salivary gland inside the mouth Similarly as buccal mucosa. These tumors are usually These cancers are usually low grade, but they can also be intermediate or high grade. Low-grade mucoepidermoid tumors have a much better prognosis than high-grade ones.

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