Carcinoma of Gingivobuccal sulcus: A Case Report

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Abstract

Squamous cell carcinoma (SCC) is responsible for the majority of metastatic diseases related to non-melanoma skin cancer disease and deaths. Histopathology remain the gold standard for diagnosis of SCC; better differential diagnosis, precise selection of areas for biopsy and non-invasive monitoring of treatment so a timely diagnosis can save the life of the patient.

Key Words: Oral Squamous cell carcinoma; Oral malignancy.

Introduction:

For the last two decades, there has been an increase in research related to oral cancer. Significant differences have been observed in cases of oral cancer, and higher rates have been reported in Indian subcontinent and parts of Asia. In India, cancer of the oral cavity is one of the top five cancer sites in any gender.[1] More than 90% of oral cancer occurs in active patients at age 45, preferred in men.[2] The incidence increases until the age of 65, when rates are stable[1]. Squamous cell carcinoma is defined as "a malignant epithelial neoplasm exhibiting squamous differentiation as characterized by the formation of keratin pearls and/ or presence of intercellular bridges" (Pindborg et al 1977).[2] It is the most common neoplasm of the oral cavity. The main cause of oral cancer has been attributed to the use of tobacco in its various forms, especially when associated with the use of alcohol (Shafer et al., 2006).[1]

Case report:

A 52-year-old male reported to the Department of Oral Pathology and Microbiology TMDRC, with the chief complaint of swelling in lower left back tooth region since 4 months. The patient was apparently alright 4 months back to start with, He noticed sudden growth in his mandibular left posterior teeth region, which gradually increased after the extraction of tooth #46, 47.

The patient had habit of chewing two packets of gutka (tobacco) per day and three packets of bidi smoking per day since 15 years.

Extra oral examination revealed a symmetrical and level 2 lymph nodes were palpable on left side. An extra oral draining sinus was present on the surface of swelling over the cheek region.

Intra orally, a multiple lobular swelling noticed over left angle region of mandible and it extended to mandibular first premolar to the mandibular second molar region.

Based on the clinical findings, a provisional diagnosis of carcinoma of ginivobuccal sulcus and differential diagnosis of Acitinic keratosis, Oral Lichen planus, Oral Leukoplakia, traumatic ulcer were made, Hematological investigations were advised and incisional biopsy was performed and the tissue submitted for histopathological analysis.

The tissue specimen was 10% formalin fixed, creamish white in color, oval in shape, measuring 0.7 cm length and 0.8 cm in width , with adequate connective tissue.

In H&E stained section, under showed epithelium overlying connective tissue stroma, epithelium was parakeratinized stratified squamous type. Epithelium showed breach in the basement membrane and dysplastic feature such as anisocytosis, anisonucleosis, hyperchromatism, altered nuclear cytoplasmic ratio, cellular and nuclear pleomorphism, few individual cells keratinization and keratin pearls, prominent and increased nucleoli, loss of polarity and irregular stratification and increased and abnormal mitotic figures were also noted.

The malignant epithelial cells were into the connective tissue stroma in the form of islands and nests as well as

individual cells. At periphery of blood vessels connective tissue stroma showed lymphoplasmocytic infiltrate, moderate amount of chronic inflammatory cells and endothelial lined blood vessels and extravasated RBCs. Overall features were confirmatory and diagnosis of well differentiated Squamous cell carcinoma was made.

Figure1.A ulceroproliferative growth was seen on anterior posterior region.

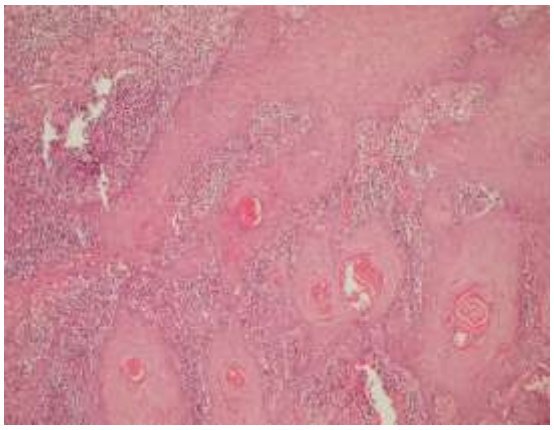

Figure 2. Photomicrograph showing tumor islands infiltrating into connective tissue stroma and demonstrating keratin pearl formation (H&E: magnification × 10).

Discussion:

Oral squamous cell carcinomas have been considered the most prevalent malignant neoplasm in the head and the neck region and are often not diagnosed until symptomatic with an advanced stage of the disease. So there it is an urgent need for method devices for the detection of premalignantlesions and oral cancer at an early stage in to improve the survival rate of patients. A number of oral cancer screening tests have been done that include oral brush biopsy, Vizilite, oral auto fluorescence including chemiluscence, photodynamic detection, toluidine blue staining, methylene blue staining, incisional biopsy and many more.[3]

Conclusion

In terms of quality of life, survival rate and treatment of the patient, early diagnosis of OSCC is very important. Dentists must have sufficient knowledge about clinical and radiological forms of anatomical structures to diagnose cancer in the oral region. Also, dentists should not overlook any abnormality in the oral region. When indicated, dentists should request a biopsy and in the presence of metastasis, the patient should be referred to the higher centers for proper treatment and care of the patient.

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