



CASE REPORT

SQUAMOUS CELL CARCINOMA- A CASE REPORT

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ABSTRACT:

Squamous cell carcinoma is the most common neoplasm of oral cavity. It most commonly occurs in males in the age group of 50 years. Rarely occurs in patients who are less than 40 years old (0.4-5.5%) with high preponderance in anterior 2/3rd of tongue. We are presenting a case of Squamous cell carcinoma involving the anterior 2/3rd of tongue with regards to its clinical and histopathological features. 75% Oral cancers are linked to modified behaviors such as tobacco and alcohol consumption. Betel nut, Areca nut chewing is strong risk factor which is consistent with our case. Histopathological findings were consistent with the reviewed articles characterized by the formation of Keratin pearls.

Keywords : Squamous cell, carcinoma, Histopathology, case report

INTRODUCTION

Squamous cell carcinoma (SCC) represents more than 90% of all head and neck cancers. It typically occurs in the elderly men during the fifth-eighth decade of life [1] and rarely occurs in the young patients under the age of 40. The recent literature has given increasing attention to SCC of tongue in young adults as authors have speculated that the incidence of SCC of tongue is increasing [2, 3]. 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)

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).

CASE REPORT:

A 35 year old female reported to the department with the chief complaint of painful non –healing ulcer in the right lateral border of the tongue for the past 6 months. The patient took allopathic medicine and was not relieved on taking medication. The patient had habit of pan-chewing for



the past 20 years. She had undergone uneventful extraction before 6 months. General physical examination revealed that the patient was moderately built and nourished. All the vital signs were within normal limits. Extra oral examination revealed palpable right sub-mandibular nodes. The surface is smooth, fixed, firm in consistency and tender on palpation. Intra-oral examination revealed 2x1 cm single ulcer, oval shaped present in the right lateral border of the tongue. The ulcer had irregular margins and undermined edges [Fig 1]



Fig-1: Intra-Oral Lesion

The base and borders was firm on palpation. The floor of the ulcer was erythematous and the base is indurated with the presence of bleeding points and tender on palpation. Tongue movements such as protrusion, retrusion and lateral movements are affected. CT scan revealed 2x1.7x1.7cm sized ill defined heterogeneously enhancing lesion in anterior two third of the right lateral boarder of the tongue suggestive of malignant growth. Upper deep cervical lymph nodes [level 2] 2x1cm on right side[Fig 2&3]



Fig 2 CT SCAN



Fig 3 CT SCAN



Histopathologic Examination shows The section shows parakeratinised stratified squamous epithelium of variable thickness with features of severe dysplasia, underlying connective tissue has malignant cells arranged which has attempted to form islands or sheets, cells also show keratin pearl formation and individual cell keratinisation. Evidence of moderately chronic inflammatory cell infiltrate with areas of hemorrhages. Histological features suggestive of 'Well differentiated squamous cell carcinoma'. (Fig 4)

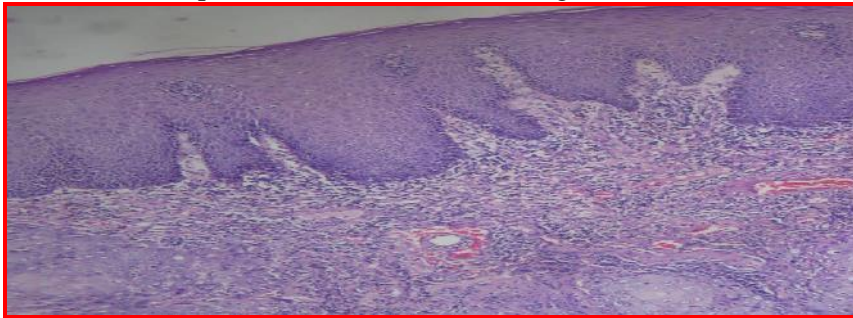


Fig 4: Histopathology

As the lesion is rapidly increasing in size in short duration tender with indurated base on palpation and associated with fixed nodes it could be suggestive of malignant ulcer.

DISCUSSION:

SCC of the oral tongue is rare in young adults. Literature shows an increase in the incidence of SCC of tongue in young adults. Atula *et al* in Finland found that percentage of SCC of tongue cases occurring in young adults increased from 3% per year for the decade. Similarly in another study by Myers *et al* incidence of SCC of tongue in young adults was found to be gradually increasing during the past 25 years.[1] Characterization of young patients with head and neck SCC is arbitrary. Most authors consider young patients with SCC as those less than 40 years of age. [1,3,5]Mc Gregor *et al*, in their study of SCC tongue in patients less than 40 years of age found that the site distribution and male to female ratio differed markedly from those above 40. The tongue was the most common site. Kurikose *et al* in their study comparing the tongue cancer in young and older SCC patients in India concluded that in younger patients, SCC of tongue was associated with fewer etiologic factors, and in older patients, it was always seen in association with smoking, alcohol or chewing.[3]e majority of the patients were women as has been confirmed by other studies[2,4].

The major etiological agents that have been implicated are the use of tobacco and alcohol abuse. Other risk factors include nutritional deficiencies, occupation, viral infection and dental irritation. These risk factors do not, however, adequately explain $5 \pm 10\%$ of SCCHN cases (Johnson, 2001; Jefferies and Foulkes, 2001; Mehrotra and Yadav, 2006). Histopathologically, SCC is divided into 3 grades depending on the degree to which the tumor resembles the parent tissue and produces keratin. They are categorized as well-differentiated, moderately-differentiated and poorly differentiated. A well differentiated tumor is mature enough to closely resemble its tissue of origin, grows at a slightly slower pace and metastasizes later in its course. On the contrary one which shows much



cellular and nuclear pleomorphism that is, immature and bears no resemblance to the tissue of origin is designated as poorly differentiated. The tumor that lies between these two extremes is labeled as moderately differentiated (Neville et al., 2008; Anneroth and Batsakis, 1987; Bryne et al., 1989). The five year survival rate studies have proven well differentiated SCC to be of a better prognosis as compared to the poorly differentiated variant (Shafer et al., 2006[7] Mehrotra and Yadav, 2006; Neville et al. 2008)[9] Epidemiological surveys have revealed that, of the areas of the oral cavity the mortality rate is lowest for lip cancer (0.04 per 100,000) and highest for the tongue, particularly the base (0.7 per 100,000), in which metastases may be ipsilateral, bilateral, or contralateral owing to cross vascular and lymphatic drainage. Those with lymph node metastases are advised a radical neck dissection and radiation therapy in amalgamation (Frazell and Lucas, 1962; Scully and Ward-Booth[6]1995; Singh et al., 1996)[8].

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