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## Case Report

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## Oral squamous cell carcinoma - A case report

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### Abstract

Oral Cancer is the 6<sup>th</sup> most common cancer globally, More than 90% cases are squamous cell carcinoma<sup>1</sup>. The incidence of OSCC in Southeast Asia and South Central Asia is reported to be more with habits like Pan chewing, tobacco chewing and diet low in fresh vegetables and fruits<sup>2</sup>. The common predisposing factors in developed countries are tobacco and alcohol<sup>3</sup>. Here we present a case report of OSCC with absence of the common predisposing factors.

**Keywords:** Oral squamous cell carcinoma, Non-Tobacco user, Non-Pan User, Non-Smoker.

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### Introduction

It is observed that not all tobacco/alcohol use develop oral cancer and equally not all the patients with OSCC have these habits. Tobacco and alcohol use are the most studied predisposing factors, not many studies have been carried out in non-smoking, non-alcohol users with reference to the other possible carcinogenic factors and pathogenesis. NSND (NON Smoker Non Drinker) patients with SCCHN (Squamous Cell Carcinoma of Head and Neck) are commonly seen in young women with oral tongue cancer, elderly women with gingival/buccal cancer, or young to middle-aged men with oropharyngeal cancer<sup>4</sup>. A single known factor is not responsible for a majority of Squamous cell carcinoma of head and neck in Nonsmokers and Non Drinkers<sup>5</sup>.

### Case Report

A 45 year old male, came to the outpatient department of SRM dental college, Chennai, with the Chief complaint of pain and Swelling in the left lower part of the face for two weeks and also complains of pain

in the left lower back tooth region. Pain was started in the left lower back tooth region 15 days back, for which he took self-medication and also had applied clove oil over the painful area. This was followed by swelling and intense pain. The pain was severe, pricking in nature, was aggravated while chewing and temporarily relieved with medication. He is neither a diabetic nor a hypertensive. He had undergone extraction of his upper front teeth several years back with no complications. He is a non-smoker, non-alcoholic, non-pan chewer. On examination, extra orally, a single diffuse swelling was present with facial asymmetry, measuring about 5x6cm in size. Swelling extends anteriorly 1cm away from left commissure of lip, posteriorly extends up to .5cm behind the left ear lobe, superiorly extends 1cm below the ala-tragal line and inferiorly upto the left lower border of mandible. On palpating the swelling it was tender, firm in consistency, non-fluctuant, Skin over swelling was pinch able. Two palpable submandibular lymph nodes were enlarged, non-tender and freely movable, no secondary changes evident. Intra Orally, on inspection

a single ill-defined ulcer evident in the left sided buccal vestibule in relation to 35 to 37 region, which is roughly measuring about 3x4cm in size. The ulcer extends from the buccal vestibule to lingual vestibule involving the gingiva and periodontal bone in 35, 36, 37 region with deep periodontal pocket. Superficial area of the ulcer appears with whitish slough with no pus discharge. On palpation tenderness was evident, ulcer was indurated with no secondary changes, The Margin of the ulcer was irregular and

floor of the ulcer was covered with white slough. Intraoral findings included Grade II Mobility of 35, 36, 37, presence of generalized attrition and generalized gingival recession. Tenderness on percussion noted in teeth 35, 36, and 37. Contrast Enhanced Computerized Tomography (CECT) of the head and neck was done, an Incisional Biopsy was done and sent for H/P evaluation, which revealed the diagnosis of squamous cell carcinoma Left buccal vestibule.





## Discussion

There are many risk factors associated with an increased risk for oral squamous cell carcinoma (OSCC) of which tobacco and alcohol are the most studied. Individuals who were smoking more than 20 cigarettes a day and consumed more than 100 g of alcohol per day are at risk for oral epithelial dysplasia, but ex-smokers of 10 or more years seem to have no greater risk than non-smokers<sup>6</sup>. The incidence of oral squamous cell carcinoma in Southeast Asia is said to be higher due to the special habits of chewing tobacco, betel nut. In western countries use of tobacco as cigarettes and alcohol use are recognized as pre disposing factors. It is observed that not all tobacco, alcohol users develop oral cancer and equally not all the oral cancer patients have these habits. Blot et al.(1988) stated that tobacco smoking and alcohol drinking combined for around 75% of all oropharyngeal cancers in the US, 25% of patients are in a special group with unknown precipitating factors<sup>7</sup>. The patient has no history of smoking neither in the past nor in the present. He is non-alcoholic, and not used to chewing paan or Tobacco. These groups of patients need to be studied further, for the possible

factors that induce molecular changes in the epithelium which may proceed to dysplasia and cancer. Some of the risk factors observed in the past are viral association particularly infection with Human papilloma virus (HPV), Infections with microorganism such as candida, Syphilis, Poor oral hygiene, Tooth loss due to aggressive periodontitis, And a diet low in fresh fruits and vegetables<sup>8</sup>. Prevalence of HPV-16 is reported to be high in Oral Squamous Cell Carcinoma and the data concerning the prevalence of HPV in the oral cavity is not similar, ranging from 2.6-98%<sup>9</sup>. There are studies that have been conducted worldwide on OSCC patients who are Non-Smokers and Non-Drinkers, whereas in Tamilnadu very few studies have been done on such patients. It is unclear which of the above agents the carcinogenic factor in our patient was. Possibly poor oral hygiene and poor diet, contributed to his Cancer. Lack of awareness and self-medication delayed his seeking medical help. More studies are warranted, to identify the potential etiological agents and molecular profile of this subgroup of Non-Smoker, Non-Drinker patients with OSCC. Understanding these difference may aid in prevention, early diagnosis and management of such cancers.

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