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Case Report

Snuff dippers cancer: An enigmatic case report

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ABSTRACT

Verrucous carcinoma, a very well differentiated malignant tumour of the oral cavity which has capacity to invade the underlying tissues very quickly. Very invasive as name suggests, this tumour is warty often misleads the oral physician to come upto a clear cut diagnosis. Encountering a patient of Verrucous carcinoma is often accidental as the awe astonishing fact for this tumour is that the subject would never report the chief complaint in maximum number if cases. Verrucous hyperplasia, a very common variant or antecedent of Verrucous carcinoma has almost similar biological potential as the former. This warty appearing tumour aggravates quickly in patients who have constant habit of tobacco chewing and areca nut chewing, thus its termed as Snuff Dippers Cancer.

Verrucous carcinoma (also known as Ackerman tumor) is an uncommon exophytic low-grade well-differentiated variant of squamous cell carcinoma. This neoplasm typically involves the oral cavity, larynx, genitalia, skin, and esophagus. Often the 'bad kind' of squamous cell carcinoma, the troubling and problematic diagnosis of this cancer makes it a physician dilemma both clinically and histopathologically.

1. Introduction

Triple D, dreadful, drastic and dangerous, a clinical disorder which takes the mankind in panic, Cancer and Malignancy is a threat to psychological relief to patients and their peers. When hearing of cancer, often people turn around sympathize and plead for quick recovery of the patient. Cancer is defined as uncontrolled cell division, often turns out to be malignant if metastasizes in distant tissues.

Classifying cancer can be often cumbersome as its divided on various basis. Depending on its origin, cancer can be Carcinoma if originated from Epithelial Tissue, it can be Sarcoma if originated from connective tissue.

Verrucous hyperplasia precedent of Verrucous carcinoma, an invasive tumour often encountered as an adjuvant by the clinicians as this carcinoma often becomes a chameleon along with the chief complaint of the patient. As the name itself suggests a cauliflower tumour, this lesion is many a times asymptomatic. Defining it, it is a well differentiated form of Squamous cell carcinoma with specific clinical and Histopathological characteristics. First described by Sir Ackerman, this tumour has various other names as Verrucous Carcinoma, Snuff Dippers Lesion, Buschke Lowenstein Tumour, Ackerman's Tumour, Carcinoma Cuniculatum, Epithelioma Cuniculatum, Florid Oral Papillomatosis. Sweet poison as it is, this tumour grows slowly and steadily, often painless but invasive and is often not encountered as the chief complaint of the patient. [1]

The purpose of this article is to describe a case encountered in our department of oral Verrucous carcinoma with an analysis of literature to identify the clinical and histopathological relationship of the disease in a patient.

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2. Case Report

A male patient of age 39 reported to the Department of Oral Medicine and Radiology with a chief complaint of pain in the upper right back tooth region since 10-15 days. The pain as described by the patient was dull aching type, intermittent in nature, non radiating, exaggerated on mastication and subsides on taking medications. On asking, the patient revealed habit history of Gutkha chewing 4-5 times a day since last 8 years and bidi smoking one bundle a day since last 10 years and was alcoholic occasionally. The patient revealed that he suffered from skin allergy past 6 years and was taking medications for it. Family history of the patient revealed that his parents were diabetic past 16 year and wife was a patient of hypothyroidism past nine years and was on medications.

On extraoral examination of lymph nodes, right submandibular lymph nodes were found to be palpable, it was solitary, soft in consistency, tender on palpation and fixed, of size 1-1.5 cm approximately. On intraoral examination of hard tissues patient had tenderness on vertical percussion of tooth in relation to 17, deep proximal caries in relation to 17, gingival recession was seen in teeth in relation to 31, 32, 33, 34, 35, 41, 42 and 43. There was furcation involvement in teeth in relation to 26, 27, 26, 47 and 16.

On examination of soft tissues a white ulceroproliferative overgrowth was found in the region of 48 which extended from buccal mucosal region in relation to the middle third part of tooth 48 anteriorly to the maxillary tuberosity region posteriorly involving the retromolar trigone area, also extended from the maxillary tuberosity region superiorly to the buccal mucosa of the distal surface in relation to 48 inferiorly, approximately of size 2 cm anteroposteriorly and 2 cm mediolaterally, it was also raised, around 0.5-1 cm approximately, irregular in surface. On palpation the lesion was indurated, rough and showed fungating appearance, was tender on palpation, non scrapable and did not bleed and no purulent exudate evolved, it also caused reduced mouth opening of 31 mm to the patient. The provisional diagnosis of Verrucous carcinoma was considered. Differential diagnosis of squamous cell carcinoma was taken into account.

Patient was advised Excisional biopsy for the involved lesion, Haematological investigations and radiographic investigation in relation to tooth 17 and 18.

On radiographic investigation, an E Speed, Adult size Intraoral Periapical Radiograph was taken in relation to 17 and 18 with normal exposure parameters. It showed deep mesioproximal caries in relation to 17 which caused loss of crown structure, enamel and dentin and approached pulp around 2 mm. It also showed loss of interdental bone between 17 and 18, there was widening of periodontal ligament space in the roots of 17 and 18 with a diffuse periapical radioluscency in relation to the mesiobuccal root of 17 around 4-5 mm in diameter suggestive of Periapical Abscess.

On histopathological examination, it was composed of squamous cell proliferations with verrucous or papillary features. The tumor cells had acidophilic, ample cytoplasm, and the nuclei were round and mildly hyperchromatic. The cellular atypia was mild or minimal. Individual keratinization, squamous pearl formation, koilocytosis and basal cell mild atypia was recognized.

The final diagnosis of Verrucous carcinoma in relation to the right buccal mucosa, retromolar trigone area was considered. Surgical excision was performed for lesion. En bloc resection was done followed by Endodontic treatment for the tooth 17. Oral prophylaxis was performed and mouthwash was prescribed. Patient was kept on maintainence phase and has shown no recurrence as of now.

3. Case Discussion

Verrucous carcinoma is described by Lauren Ackerman in the year 1948. It is a slow growing tumour, often aggressive and it is quite difficult to differentiate between the benign and malignant forms as due to its distinct clinicopathological behaviours. It can be distinguished from Squamous Cell Carcinoma due to its lack of ability to metastasize, its slow and aggressive growth and rare dysplasia features.[1] It is a type of tumour characterized by increasing papillary transformation often pedunculated. This tumour is often accompanied with special Leukoplakia at its edges, but no such evidence is seen in the above presented case. More often present in the orofacial region and aerodigestive regions, this tumour is often confused with verrucous hyperplasia.[2,3]

Oral verrucous carcinoma is an uncommon tumor which presents as a tan/ white, warty growth with a broad base attachment. The most common sites for its occurrence include buccal mucosa, mandibular alveolar crest, gingiva, tongue with glottic larynx being the most frequent non-oral site. The tumor rarely crosses 10 cm in its greatest dimension. Mostly verrucous carcinoma mostly occurs in males in 5-6th decade of life. Etiology comprises the Use of tobacco in the smokeless and inhaled forms has been predominantly reported in the affected patients, followed by betel nut chewing and use of alcohol. The oral hygiene is invariably poor in all the cases. The role of human papillomavirus (HPV) in verrucous carcinoma has been a matter of debate.[3] The most common differential diagnosis encountered clinically include a spectrum of closely resembling lesions comprising of verrucous hyperplasia, proliferative verrucous leukoplakia and squamous cell carcinoma. Verrucous carcinoma is a locally invading tumor and does not spread to the local lymph nodes. If lymph nodes are palpable, they usually present as an inflammatory reaction in large secondarily infected lesions.[4,5] When accompanied with bony structures such as the mandible,

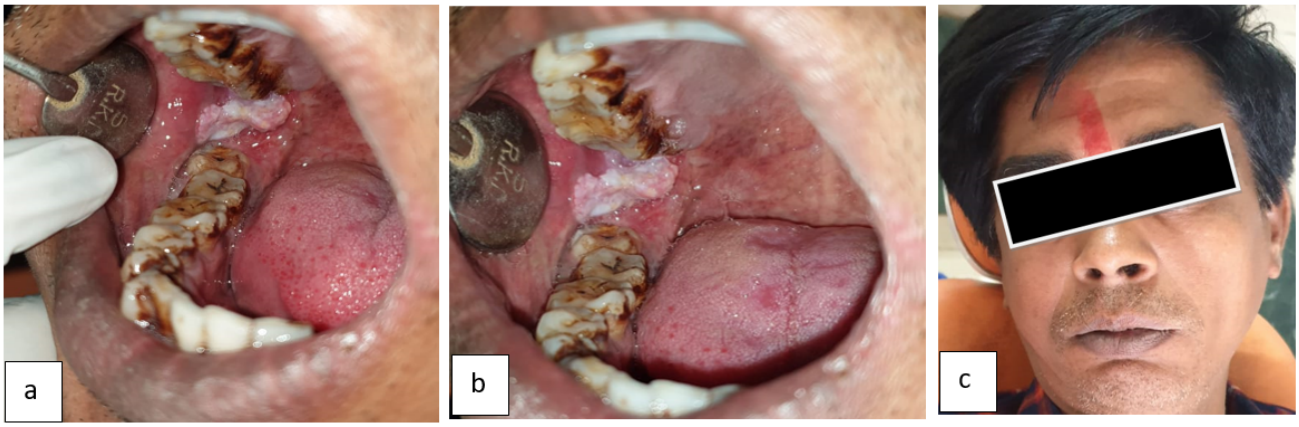

Fig. 1: Patient clinical appearance intraoral

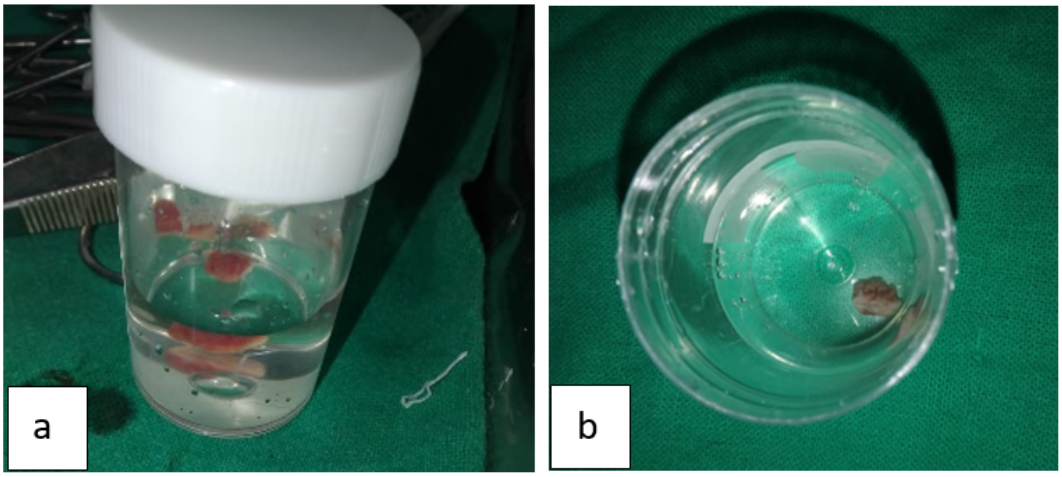

Fig. 2: Post surgical specimen

the tumour destroys the bony tissue on a broadly, and also erodes the sharp margin rather than infiltrating into the marrow spaces. Prompt diagnosis is of paramount importance. Deep surgical biopsies and excision quickly cures the tumour. Bleomycin given before surgeries may sometimes help in shrinking the size of the tumour.[6] While surgery forms the widely accepted mode of treatment for verrucous carcinoma, radiation is employed in advanced cases due to reports of radiation induced dysplasia.[3,7,8]

4. Conclusion

It is evident from our discussion that clear guidelines and prompt eagle's eye is required for the recognition of the clinical and histopathological features of the verrucous carcinoma. It appears to be a special type of oral squamous cell carcinoma with specific clinical, morphological and cytokinetic features. It is a type of exphytic squamous mucosal or cutaneous tumor that are lodged over epithelial surfaces with papillary micronodular appearance. Therefore in depth understanding is required for the quick and prompt diagnosis of this lesion.

5. Declaration of Patients Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published but the anonymity is no guaranteed.

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7. Conflicts of Interest

There are no conflicts of interest.

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