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A Rare Case Report of Basaloid Squamous Cell Carcinoma.

Vinutha Gali*, Hemalatha Ganapathy, and BO Parijatham.

Department of Pathology, Sree Balaji Medical College and Hospital, Bharath University, Chrompet, Chennai 600044, Tamil Nadu, India.

ABSTRACT

Basaloid squamous cell carcinoma(BSCC) is a rare variant of squamous cell carcinoma(SCC). It represents 15%[1] of all Squamous cell carcinomas of the head and neck. It is an aggressive and high grade variant of SCC composed of both basaloid and squamous components. The histopathological appearance is distinct from well differentiated SCC, with varying degrees of typical squamous component interspersed with nests of basaloid cells arranged in lobules with prominent peripheral palisading and central foci of comedo necrosis. Diagnosis of Basaloid squamous cell carcinoma still remains on the routine haematoxylin and eosin sections by recognizing the typical histological criteria. Here we present a case of BSCC of oral cavity.

Keywords: Basaloid, Aero digestive tract, nuclear palisading, mitotic figures.

Corresponding author

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INTRODUCTION

Squamous cell carcinoma is the most common malignancy of oral cavity and oropharynx. SCC has a high male to female ratio (3:1) and a strong relationship to tobacco smoking and alcohol consumption, also increased incidence is noted with use of snuff and chewing tobacco.

Following variants of SCC are seen in the oral cavity, Keratinizing-type, Non keratinizing, Verrucous carcinoma, Spindle cell carcinoma, Papillary, Adeno squamous and Basaloid squamous cell carcinoma.

Basaloid squamous cell carcinoma (BSCC) is a rare and aggressive variant of squamous cell carcinoma, most commonly seen in upper aero digestive tract. Basaloid squamous cell carcinoma was officially recognized as a distinct clinic pathological entity in WHO 2005 classification [4].

Case report

A 47yrs male presented to the surgical department with history of swelling under the tongue since 6months. On examination, swelling measured 3x3cm, tender and warm with bad oral hygiene and does not bleed on touch. Excision biopsy was done and the specimen was sent for histo pathological examination.

Gross: Received a single grey-brown soft tissue bit measuring <0.5cm.

Microscopy: Sections show fragments of stratified squamous epithelium with dysplastic changes overlying a cellular neoplasm composed of basaloid cells arranged in nests and islands with peripheral nuclear palisading and central necrosis, separated by fibrous bands and focally showing papillary formation. Few mitotic figures are also seen.

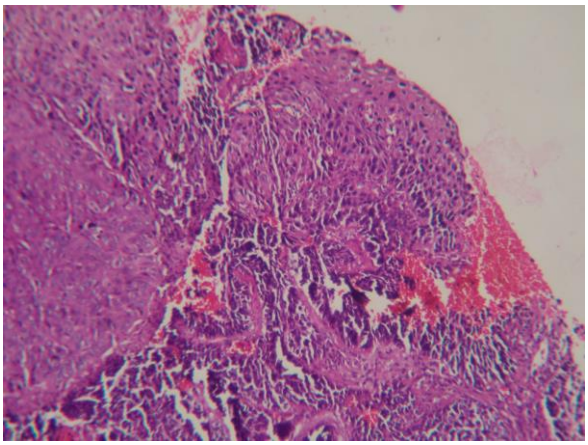

Figure 1: 10X view: dysplastic squamous cells and solid islands of basaloid cells.

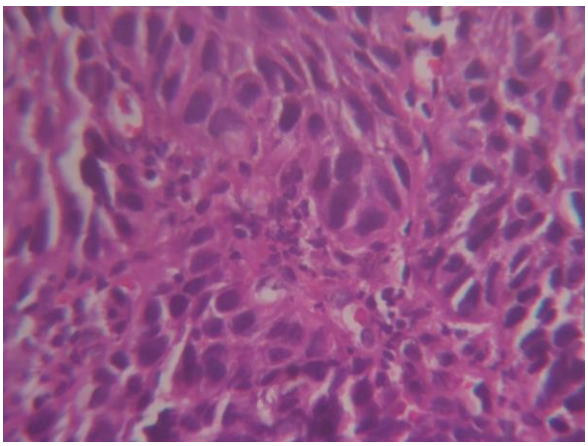

Figure 2: 40Xview:dysplastic squamous cells and mitotic figures.

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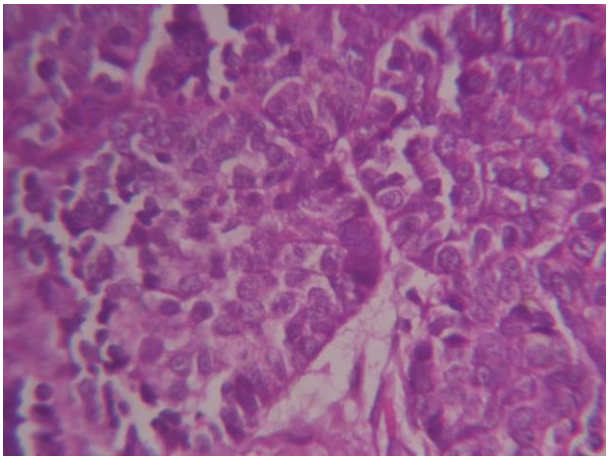

Figure 3: 40X view: showing basaloid cell nests and palisading of the nuclei.

With the above microscopic findings, it was diagnosed as Basaloid Squamous cell carcinoma.

DISCUSSION

BSCC was first discovered by Wain et al in 1986 in the oropharynx, larynx and hypopharynx as a distinct histological variant of SCC. It is characterized by molded nests forming 'jigsaw' pattern. Tumor cells are basaloid with hyperchromatic round to oval nucleus and scant cytoplasm. Hyaline material or extracellular mucoid material may be present. Abrupt squamous differentiation or overlying squamous dysplasia is seen. BSCC of the oral cavity and oropharynx is frequently associated with HPV infection [3,6] and when so, have better prognosis than BSCC at other sites which is aggressive with high rates of distant metastasis.

Cosme Ereno et al have mentioned criteria for diagnosis of BSCC as Wain's criteria [4] which includes: peripheral palisading, association with SCC, high nuclear cytoplasmic ratio, high mitotic rate and solid growth pattern.

By Immunohistochemistry, BSCC expresses cytokeratin and EMA positivity.

Treatment is similar to other variants of squamous cell carcinoma [1,2]. In case of metastasis, Radical neck dissection and radio therapy [5] is the treatment of choice.

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