

Multinucleated Giant Cell Reaction in Well-differentiated Squamous Cell Carcinoma of Oral Cavity

Squamous cell carcinoma (SCC) is the most common oral cancer and presents with diverse histopathological features based on the degree of differentiation. Major component of well-differentiated SCC includes keratinizing islands of dysplastic squamous epithelial cells and dense inflammatory response.^[1] Keratin component is triggering factor for foreign body multinucleated giant cell (MGC) reaction in the stroma, which may misguide the pathologist to aggressive forms of SCC containing pleomorphic giant cells.^[2]

The present case aims to produce a suitable information on MGC including their pathogenesis and significance in oral SCC. A 49-year-old male presented with ulcerated growth in the right lateral border of tongue for 2 months. Patient also complained of pain and difficulty in chewing. He was chronic smoker and had a history of chewing tobacco for the past 12 years. On examination, ulcerative lesion of 1 cm × 1 cm was shown in the right lateral border of tongue. Biopsy showed well-differentiated SCC. The right hemiglossectomy was done. Microscopic examination showed features of well-differentiated SCC and stroma showed dense mononuclear inflammatory cells with the presence of MGC reaction [Figure 1]. The MGCs were located surrounding the neoplastic cells and near the keratin pearls.

The presence of MGCs in a well-differentiated SCC has been reported in the literature, although the exact nature of MGCs in SCC is controversial.^[1] In 1900, Cullen described foreign body giant cells in cervical SCC.^[3] Many authors identified MGCs in SCC of different sites including oral cavity and more commonly in SCC treated by radiotherapy.^[2,4] However, this event is rare in the oral cavity.^[1] The giant cells form the major component of defensive system of our body. These cells are originated by

an immune reaction against the tumor cells, some have reported that MGCs may be of neoplastic or inflammatory origin.^[1] We report an uncommon finding of MGCs in the tumoral stroma in an untreated well-differentiated SCC with MGCs demonstrating CD 68 positivity showing the histiocytic origin. The giant cells may be shown in other oral carcinomas such as spindle cell carcinoma and giant cell carcinoma.^[5] Spindle cell SCC is a variant of SCC which is poorly differentiated and demonstrates bizarre pleomorphic giant cells. Giant cell carcinoma is a rare pathological variant of oral SCC and is more frequently seen in lungs and larynx. Moreover, in giant cell carcinoma, malignant giant cells are shown. Both these variants have worse prognosis when compared to SCC with MGCs. It is believed that the prognosis in SCC with MGCs remains unaltered. Although the importance of MGCs in oral SCC is unclear, pathologists must know about such a benign component and carefully give the diagnosis.

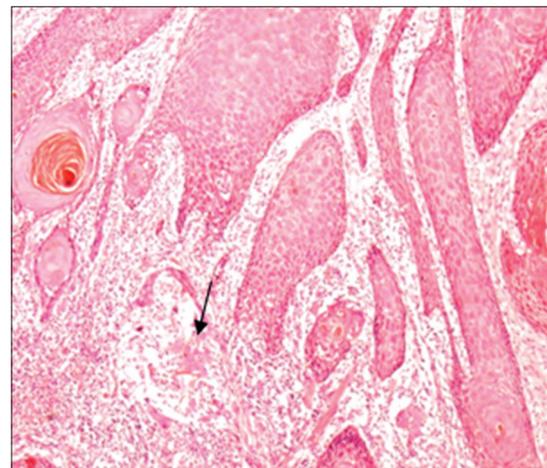


Figure 1: Well-differentiated squamous cell carcinoma with the presence of multinucleated giant cell reaction (arrow)

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References

1. Martins FL, Diego AC, Alexandre B, Elismauro FM. Well-differentiated squamous cell carcinoma and a foreign body reaction—a case report. *Oral Health Dent Manag* 2017;16:1-4.
2. Patil S, Rao RS, Ganavi BS. A foreigner in squamous cell carcinoma! *J Int Oral Health* 2013;5:147-50.
3. Cullen TS. Cancer of Uterus, Its Pathology and Symptomatology, Diagnosis and Treatment also the Pathology of diseases of the Endometrium. New York: D. Appleton and Co.; 1900. p. 97-8.
4. Moore T, Moore AY, Langer M, Wagner RF. Tumor remnants within giant cells following irradiation of cutaneous squamous cell carcinoma. *Dermatol Surg* 1998;24:1094-6.
5. Rinker MH, Fenske NA, Scalf LA, Glass LF. Histologic

variants of squamous cell carcinoma of the skin. *Cancer Control* 2001;8:354-63.

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