TRANSFORMING GROWTH FACTOR-ALPHA (TCP- a) IMMUNE DETECTION IN ORAL SQUAMOUS CELL CARCINOMA

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ABSTRACT

The present study comprised 27 biopsies of oral squamous cell carcinoma including 13 cases of well, 9 cases of moderately and 5 cases of poorly differentiated types. In addition, 5 control cases of uninvolved oral mucosa were obtained from the safety margins nearby these tumors. Paraffin sec-tions of all biopsies were stained with hematoxylin and eosin for histopathological evaluation and grading of oral squamous cell carcinoma. Simultaneous tissue slides for all cases were stained by monoclonal anti-Transforming Growth Factor - Alpha (TGF-a) antibody. The immunostain re- vealed that the 5 control cases were positively stained by TGF-a antibody demonstrating faint and uniform cytoplasmic reactivity especially in the granular cells and superficial cells of prickle-cell layer. Sections of the oral squamous cell carcinoma were also positively stained by TGF-a especial- ly in the basaloid and spinous layers. They showed more intense staining than the normal cells. The staining intensity was also increased with the grade of malignancy. Most of the inflammatory cells infiltrating the stroma of oral squamous cell carcinoma especially the eosinophils were also positive for TGF- a. The results of the present study showed that the TGP- a may be considered as a contrib- uting factor for the malignant transformation of oral squamous epithelial cells. Its presence is par- allel to the grade of malignancy.

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