STUDY OF EXPRESSION OF PCNA IN ORAL VERRUCOUS AND SQUAMOUS CELL CARCINOMAS

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Proliferation is a term that describes the orderly progression of a cell through the cell cycle for duplication and the sequential events of which is well documented. The proliferative activity of a tissue is a direct result of the stimulatory and inhibitory growth signals received by the cells, which compile it.

Cancers arise as a consequence of multiple molecular events such as activation of number of Oncogenes accompanied by the inactivation and disruption of one or more tumor suppressor genes, which control the progression of cell cycle from one phase to another.

Therefore, the knowledge of cell proliferative activity i.e. the cellular proteins that are involved in the control of cell proliferation, is essential for understanding the biology of tumors. Cell kinetic data may also be a useful adjunct to histologically based tumor classifications, and is among the most important indicators of treatment response and relapse in many types of cancers **(Tsuji et al, 1992; van Dierendonck et al, 1991).**[1,2]

Many biologic markers have been proposed to provide information on the differentiation, proliferation and prognosis of various lesions. Monoclonal antibodies directed towards nuclear antigens are increasingly used as tools to obtain valuable information concerning the proliferative changes of the tumors.

Among these, Proliferating cell nuclear antigen (PCNA), a 36 kD acidic nuclear protein, has been identified as an auxiliary protein of DNA polymerase delta **(Bravo et al, 1987).**[3] This protein of interest is directly involved in DNA synthesis **(Jaskulski et**