

"CHROMATIN ASSEMBLY FACTOR - 1 (CAF-1) - MEDIATED REGULATION OF CELL PROLIFERATION AND DNA REPAIR: A LINK WITH BIOLOGICAL BEHAVIOUR OF SQUAMOUS CELL CARCINOMA OF THE LARYNX?"

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Squamous cell carcinoma (SCC) of the larynx presents an aggressive behavior and poor prognosis. The clinical-pathological parameters are unable to provide an unequivocal outcome prevision, so the search for new molecular markers for this tumor is still on. The Chromatin Assembly Factor-1 (CAF-1) plays a major role in the chromatin assembly during cell replication and DNA-repair. One of CAF-1 proteic subunit, p60, has been recently proposed as new reliable proliferation marker, useful in prognostic evaluation of some solid human cancers.

We evaluated the immunohistochemical expression of the p60/ CAF-1 subunit on a series of SCC of the larynx. The findings were correlated with the expression of Proliferating Cells Nuclear Antigen (PCNA) and with the clinical-pathological and follow-up data of patients. CAF-1/p60 was found expressed in all tumors and the degree of expression resulted directly correlated with the clinical aggressiveness of the tumors besides the classical prognostic parameters.

CAF-1 mediated deregulation of cell proliferation takes place in aggressive cases of SCC of the larynx and the evaluation of CAF-1 expression by immunohistochemistry on routine tissue section appears as a promising tool for evaluating the prognosis of the single cases of larynx SCC.

This may be relevant for the proposal of closer follow-up protocols and/or new therapeutic regimens.