

OVEREXPRESSION OF P53 AND NEOPLASTIC CELL PROLIFERATION IN UNDIFFERENTIATED NASOPHARYNGEAL CARCINOMA

Mana Taweevisit

Department of Pathology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand

Abstract. The author investigated the p53 status in correlation with cellular proliferation in the undifferentiated subgroup, which is infrequently found in caucasians. The author evaluated formalin-fixed, paraffin embedded tissue blocks from sixty cases with undifferentiated carcinoma of the nasopharynx by p53 and Ki67 immunostaining. All samples were retrieved from the surgical pathology file at King Chulalongkorn Memorial Hospital from 2001-2005. The patients had a mean age of 47 years. Stage IV was the most common stage, found in 21 cases (35%). Forty-four tumors (73%) overexpressed p53 protein, which was significantly associated with high rate of tumor cell proliferation ($r = 0.477$, $p < 0.001$). The higher the amount of p53 stained, the higher the rate of tumor cell proliferation. However, there was no statistically significant association between p53 protein overexpression and clinical status, including tumor volume, nodal status, and metastatic condition. This observation may explain why some tumors are resistant to radiation and are poorly controlled when they recur in distant organs.