

ASSOCIATION BETWEEN VASCULAR ENDOTHELIAL GROWTH FACTOR (VEGF) EXPRESSION AND TUMOR ANGIOGENESIS IN BENIGN AND MALIGNANT AMELOBLASTOMAS

Manal Ibrahim El Nouaem*

ABSTRACT

The aim of the present study was to clarify the possible role of angiogenesis in epithelial odontogenic tumors. Thirteen benign and four malignant ameloblastomas were examined Immunohistochemically, to detect the expression of vascular endothelial growth factor (VEGF) which is a major angiogenic factor. While, micro vessel density (MVD), was assessed by the use of anti CD31 antibody. VEGF was detected in the cytoplasm of neoplastic odontogenic epithelial cells. Both benign and malignant ameloblastomas showed elevated VEGF expression. MVD in both benign and malignant ameloblastomas was high; indicating increased demand for blood in the neoplastic tissues. It was concluded that the VEGF acts as an important factor of angiogenesis in the epithelial odontogenic tumors and that its increase points out its association with neoplastic or malignant transformation of odontogenic epithelial cells.