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Immunohistochemical Evaluation of Vascular Endothelial Growth Factor (VEGF) in Splenic Hemangiomas and Hemangiosarcomas in Dogs

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ABSTRACT

Formation of new blood vessels is paramount for tumour growth and metastatic dissemination and vascular endothelial growth factor (VEGF) is one of the key regulators of this process. The purpose of this study was to evaluate the immunohistochemical expression of VEGF in 23 splenic hemangiosarcomas and 7 splenic hemangiomas in dogs. Blood tests performed previous to splenectomy were analysed for correlation with tumour VEGF expression. Results showed significantly higher VEGF expression in hemangiosarcomas than hemangiomas and lower hematocrit values and red cell count in dogs affected with malignant neoplasia ($P < 0.05$). These findings suggest the presence of high VEGF levels may be related to the malignant vascular proliferation seen in hemangiosarcomas.

KEYWORDS

Canine; Spleen; Angiogenesis; Hemangiosarcoma; Immunohistochemistry; Vascular Endothelial Growth Factor

Cite this paper

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