Abstract

Biopsies from human metastatic melanomas were analyzed in order to elucidate the relationship between MCP-1/CCL-2 (monocyte chemoattractant protein-1) chemokine expression by tumor cells, angiogenesis and aggressiveness in tumor development. The chemokine was expressed in 100% of the cases, with heterogeneity in the percentage of positive cells within the tumor mass. Tumors presented an important infiltration of macrophages, particularly associated to areas of active angiogenesis. Microvascular development, assessed by immunohistochemistry, correlated with the high percentage of cells expressing MCP-1/CCL-2. There was also significant correlation with vascularization and mitotic index. These results suggest that vascularization could be predictive of more aggressive melanoma metastasis, where the MCP-1/CCL-2 expression would be closely associated to vessel development through macrophages recruitment.

Keywords

monocyte chemoattractant protein-1 * melanoma * angiogenesis
* macrophages