Overexpression of protein kinase Calpha mRNA may be an independent prognostic marker for gastric carcinoma

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摘要

Abstract

BACKGROUND AND OBJECTIVES: The variability of the prognosis of gastric carcinoma drives extensive researches for novel prognostic markers. The aims of this study were to correlate the expression of protein kinase Calpha (PKCalpha) mRNA with clinicopathological parameters and to evaluate the significant value of PKCalpha in gastric carcinoma prognosis. METHODS: PKCalpha mRNA levels were analyzed in tumor/non-tumor pairs of gastric tissues from surgical specimens of 41 patients with gastric carcinoma employing quantitative real-time polymerase chain reaction. Expression of PKCalpha in gastric carcinoma was also examined using immunohistochemistry. RESULTS: PKCalpha mRNA expression was significantly upregulated in gastric carcinoma (P = 0.007). Overexpression of PKCalpha mRNA was correlated with distant metastasis (P = 0.040). Patients with high PKCalpha mRNA expression had a significantly poorer overall survival compared with patients with low PKCalpha mRNA expression (P = 0.0113). The uni-variate Cox regression analysis showed that high PKCalpha mRNA expression (P = 0.0363) and depth of invasion (P = 0.0443) were two significant prognostic markers for gastric carcinoma. In backward stepwise multi-variate analysis, PKCalpha mRNA overexpression was also proved to be an independent prognostic marker for gastric carcinoma (P = 0.0275). CONCLUSIONS: Our results suggest that overexpression of PKCalpha mRNA has correlation with distant metastasis and may be an independent prognostic marker for gastric carcinoma. (c) 2008 Wiley-Liss, Inc.