Cytosol vascular endothelial growth factor in endometrial carcinoma: correlation with disease-free survival

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摘要

Abstract

Objective. The aim of this study was to evaluate whether vascular endothelial growth factor (VEGF) could be a marker for disease-free survival in endometrial carcinoma patients. Methods. Fifty-three patients with endometrial carcinoma undergoing surgery were enrolled. Clinical and pathologic items were recorded. Cytosol VEGF was quantified by enzyme immunoassay. The microvessel density (MVD) of the excised tumors was immunohistochemically assessed. The relationship among MVD, cytosol VEGF concentration of the tumor tissues, and clinicopathologic parameters was analyzed. The risk factors influencing clinical outcome were tested. Results. Higher cytosol VEGF concentrations and MVD values were noted in tumors with advanced stage (more than stage I) (917 versus 125 pg/mg, P = 0.03; 94.1 +/- 37.8 versus 60.8 +/- 38 .9, P = 0.008), lymphovascular emboli (917 versus 102 pg/mg, P = 0.001; 94.4 +/- 33.2 versus 62.4 +/- 40. 7, P = 0.009), and lymph node metastasis (1032 versus 95 pg/mg, P < 0.001; 116.5 +/- 30.8 versus 56.7 +/- 33.3, P < 0.001). The cytosol VEGF and MVD showed a positive linear correlation (VEGF versus MVD, r = 0.41, P = 0. 003). Grade 3 tumor and overexpressed cytosol VEGF (>800 pg/mg) are independent risk factors for recurrence. There was a trend that patients with grade 1 or 2 tumors and normal-expressed VEGF had the highest probability of disease-free survival, and patients with grade 3 tumors and overexpressed cytosol VEGF had the poorest probability of disease-free survival.Conclusions. Cytosol VEGF had a good correlation with the disease progression and metastasis in endometrial carcinoma, and it might also be an independent prognostic factor for disease- free survival of endometrial carcinoma patients. (C) 2001 Academic Press.