

ASSESSMENT OF THE LEVEL OF VEGF EXPRESSION IN LOW-GRADE COLON TUMORS FOR COURSE DISEASE PREDICTION

Shulgan K.V., Shtabinskaya T.T.
Grodno State Medical University, Belarus
Department of Pathological Anatomy
Supervisor – MD, Professor Basinskiy V.A.

Introduction. The most important proangiogenic factor involved in the pathological angiogenesis is vascular endothelial growth factor VEGF (vascular permeability factor or) [1]. The relationship between the level of angiogenesis in tumors, and metastasis of various localization was confirmed by the correlation between the disease and course of VEGF expression in the primary tumor [2].

Purpose. Assess the level of VEGF expression in the low-grade colon cancer for prediction of patients adjusted disease-free survival.

Materials and methods. Surgical material of 55 patients (20 men and 35 women) aged 37.3 to 82.8 years (63.43 (56,9-69,5)) with histologically verified low-grade cancer of the colon (G1-2) has been studied. The study was performed on paraffin sections, 3-4 microns thick, stained with hematoxylin and eosin, immunohistochemical - performed using mouse monoclonal antibodies to VEGF 1 (ab1316) by standard methods. Quantitation of the level of expression was performed using the program Aperio Image Scope [3]. Statistical analysis was performed using STATISTICA 10.0 (SNAXAR207F394425FA-Q).

Results. Almost all cancers (90.9%) were located in the distal. 29 patients have been verified adenocarcinoma G1 (52.7%) and 26 - G2 (47,3%). In 39 cases (70.90%) pT3 identified in 14 cases (25.45%) - pT2 and 2 patients - pT1 and pT4. At the time of diagnosis in 32 patients metastases were found in the regional lymph nodes (N1-2 - 32 (58.2%)). Hematogenous metastases were diagnosed in 6 patients (10.9%). In 20 patients (36.42%) with time having relapses, with 6 of them during the first two years after surgery, and 13 for five years. On average, the tumor recurred after 2.46 years (1,90-3,69). Overall survival (January 2016) was 6.2 years (3,5-12,5). The most accurate indicator reflecting essentially a cure for cancer is adjusted disease-free survival. In its calculation of the patients who died of the underlying disease, as well as those patients who during his lifetime was diagnosed locoregional recurrence or distant metastases are counted as dead - on relapse diagnosis time and / or metastasis, or death [4]. Adjusted disease-free survival was 3.1 years (2,2-4,3). We evaluated the VEGF expression in the parenchyma and stroma of tumors, as well as the edges of the incision. Statistically significant differences in the expression or in tumor tissue ($p = 0.41$) or in the edges of the operating sections ($p = 0.22$) were found adjusted depending on disease-free survival.

Conclusions. Level of VEGF expression in low-grade tumors can't be used as an independent prognostic factor.

Literature.

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