

肿瘤防治

循环肿瘤细胞p53基因表达和端粒酶活性在大肠癌临床病理学中的意义

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摘要 背景与目的: 探讨大肠癌患者循环肿瘤细胞p53基因的表达和端粒酶活性的变化及其临床病理学意义。材料与方法: 113例大肠癌患者、13例良性大肠肿瘤患者术前的外周血和28例健康供血员的外周血, 用分层液分离含有循环肿瘤细胞的单个核细胞, 应用流式细胞仪和TRAP-ELISA法, 分别检测p53基因表达和端粒酶活性。结果: 在105例有信息的大肠癌患者中, p53基因表达和端粒酶活性的阳性率分别为74.3%(78/105)和61.0%(64/105)。异常的p53基因表达和端粒酶活性水平均与大肠癌患者的淋巴结转移显著相关(P<0.05), 两者的联合检测提高了对大肠癌淋巴结转移的预测水平。p53基因异常表达还与大肠癌细胞分化程度显著相关(P=0.003)。结论: 循环肿瘤细胞异常的p53基因表达和端粒酶活性是大肠癌的恶性生物学标志, 两者密切相关, 联合检测可提高对淋巴结转移状态的预测水平。

关键词 [大肠癌](#); [p53基因](#); [端粒酶](#); [转移](#); [循环肿瘤细胞](#)

Clinicopathological Significance of p53 Gene Expression and Telomerase Activity in

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Abstract **BACKGROUND AND AIM:** To study the clinicopathological significance of p53 gene expression and telomerase activity in circulating tumor cells of patients with colorectal carcinoma. **MATERIALS AND METHODS:** Mononuclear cells containing circulating tumor cells were isolated by Ficoll-Hypaque gradient centrifugation in peripheral blood from 113 preoperative patients with colorectal carcinomas, 13 patients with benign colorectal disease, and 28 healthy volunteers. FCM and TRAP-ELISA were used to evaluate p53 gene expression and telomerase activity, respectively. Experimental data were analyzed by SPSS 11.0 software and χ^2 test. **RESULTS:** Among 105 informative patients with colorectal carcinoma, positive rate of p53 expression and telomerase activity were 74.3%(78/105) and 61.0%(64/105), respectively. Aberrant expression levels of both p53 gene and telomerase in patients with colorectal cancer were significantly correlated with lymph node metastasis (P<0.05) and their simultaneous measurement could raise the prediction accuracy of metastasis. Expression of p53 gene was also significantly correlated with differentiation degree of colorectal carcinoma (P=0.003). **CONCLUSION:** Aberrant p53 gene expression and telomerase activity in circulating tumor cells might be malignant biomarkers. Both were closely related and could predict nodal involvement.

Keywords [colorectal carcinoma](#) [p53 gene](#) [telomerase](#) [metastasis](#) [circulating tumor cells](#)

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