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APC、β-catenin 和c-myc 在大肠癌中的表达及其意义

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Expression and Signif icance of APC,β-catenin and c-myc Proteins in Colorectal Carcinoma

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摘要 目的 探讨APC、β-catenin和c-myc在大肠癌发生、发展中的作用。方法 采用免疫组化方法检测30例正常大肠黏膜、30例大肠腺瘤、10例大肠腺瘤恶变及50例大肠癌组织中APC、pcatenin和c-myc蛋白的表达情况。结果 大肠癌和大肠腺瘤恶变APC阳性率分别为44．0%、40．0%，显著低于大肠腺瘤（86．7%）和正常大肠黏膜（100%）（P〈0.01）。大肠癌、大肠腺瘤恶变和大肠腺瘤β-catenin胞浆和（或）胞核异位表达率分别为62．0%、50．0%、30．0%，显著高于正常大肠黏膜（0）（P〈0.01），大肠癌8Icatenin异位表达率显著高于大肠腺瘤（P〈0.01）。大肠癌、大肠腺瘤恶变、大肠腺瘤c-myc阳性率分别为56．0%、60．0%、46．7%，显著高于正常大肠黏膜（0）（P〈0.01）。大肠癌中8-catenin膜表达缺失率为：46．0%，显著高于大肠腺瘤（10．0%）和正常大肠黏膜（0）（P〈0.01），且与大肠癌组织分化程度、浸润深度、淋巴结转移、Dukes分期有关。APC蛋白表达与大肠癌组织分化程度有关。大肠癌中8Icatenin异位表达与c-myc阳性表达呈正相关关系（r=0．63，P〈0.01），而与APC阳性表达呈负相关关系（r=—0．39，P%0．05）。结论 APC失表达和（或）pcatenin异位表达，激活癌基因c-myc过表达与大肠癌的发生、发展密切相关，可能是大肠癌发生的早期事件；pcatenin膜表达缺失与大肠癌的侵袭、转移有关。

关键词： 大肠癌 APC β-catenin c-myc

Abstract： Objective To investigate the role of APC ,β-catenin and c-myc in the carcinogenesis and progression of colorectal carcinoma. Methods Expression of APC ,β-catenin and c-myc proteins was examined immunohistochemically in 30 cases of normal colorectal mucosa ,30 cases of colorectal adenoma ,10 cases of colorectal adenoma carcinogenesis and 50 cases of colorectal carcinoma. Results The positive expression rates of APC were 44. 0 % and 40. 0 % respectively in colorectal carcinoma and colorectal adenoma carcinogenesis ,and both of the rates were significantly lower than that of colorectal adenoma (86. 7 %) and normal colorectal mucosa (100 %) (P < 0. 01) . The cytoplasmic and/ or nuclear β-catenin expression rates were 62. 0 % ,50. 0 % and 30. 0 % respectively in colorectal carcinoma ,colorectal adenoma carcinogenesis and colorectal adenoma ,and all of the rates were significantly higher than that of normal colorectal mucosa (0) (P < 0. 01) . The cytoplasmic and/ or nuclearβ-catenin expression rate in colorectal carcinoma was significantly higher than that of colorectal adenoma (P < 0. 01) . The positive expression rates of cmyc were 56. 0 % ,60. 0 % and 46. 7 % respectively in colorectal carcinoma ,colorectal adenoma carcinogenesis and colorectal adenoma ,and all of the rates were significantly higher than that of normal colorectal mucosa (0) (P < 0. 01) . The reduced membranousβ-catenin expression rate in colorectal carcinoma was significantly higher than that of colorectal adenoma and normal colorectal mucosa (P < 0. 01) . The reduced membranousβ-catenin expression was closely related with the tissue differentiation degree , the depth of invasion ,lymph node metastasis and Dukes stage in colorectal carcinoma. The expression of APC was closely related with the tissue differentiation degree in colorectal carcinoma. The cytoplasmic and/ or nuclearβ-catenin expression was thus in positive correlation with the expression of c-myc (r = 0. 63 , P < 0. 01) , and was in negative correlation with the expression of APC (r = - 0. 39 , P < 0. 05) .Conclusion The reduced cytoplasmic APC expression , the cytoplasmic and/ or nuclear β-catenin expression , and the overexpression of c-myc may play a pivotal role in carcinogenesis and progression of colorectal carcinoma ,and may be an early event . The reduced membranousβ-catenin expression may be related to the invasion and metastasis of colorectal carcinoma.

Key words： Colorectal carcinoma APC β-catenin c-myc

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没有本文参考文献

[1] 吕慧芳;刘红亮;陈小兵;陈贝贝;李宁;邓文英;马磊;罗素霞. TIP30基因对大肠癌细胞HCT116生物学特性的影响[J]. 肿瘤防治研究, 2012, 39(1): 13-17.

[2] 王丽芳;卢安;孟凡茹;曹青;纪昕;单保恩 . 香加皮三萜类化合物对实验性大鼠食管癌的阻断作用及机制[J]. 肿瘤防治研究, 2012, 39(1): 23-27.

[3] 周飞;崔滨滨;刘彦龙;刘建玲;阎广真;杨钰 . usp22和ki67在大肠癌组织中的表达及其临床意义[J]. 肿瘤防治研究, 2012, 39(1): 68-70.

[4] 杨光华;赵晶;李磊;王天阳;张小艳;吕春秀;王凤安. BAG-1在大肠癌中的表达及其临床意义[J]. 肿瘤防治研究, 2012, 39(1): 71-74.

[5] 申兴斌;段惠佳;赵杨;张古林 . 垂体肿瘤转化基因在大肠正常黏膜、腺瘤及大肠癌组织中的表达及意义[J]. 肿瘤防治研究, 2011, 38(9): 1042-1045.

[6] 刘培根;马利林;朱建伟. 氧化应激对大肠癌细胞迁移、血管内皮生长因子表达及细胞间通信的影响[J]. 肿瘤防治研究, 2011, 38(8): 857-860.

[7] 陈曦;毛勤生;黄华;朱建伟. PKC-ζ在大肠良恶性组织中的表达及其与Cortactin蛋白的关系[J]. 肿瘤防治研究, 2011, 38(8): 903-908.

[8] 吴民华;陈小毅;梁艳清 . STAT5和c-myc在大肠癌中的表达及意义[J]. 肿瘤防治研究, 2011, 38(7): 806-808.

[9] 曾祥勇;张昌菊. 肼苯哒嗪对宫颈癌细胞系侵袭力的影响[J]. 肿瘤防治研究, 2011, 38(2): 130-133.

[10] 韩向春;康金旺;郑力强;左连富. Wnt1、β-catenin、APC和cyclin D1蛋白在胃癌中的表达[J]. 肿瘤防治研究, 2011, 38(2): 163-166.

[11] 周莉;侯安继. ATP生物荧光技术指导大肠癌患者腹腔化疗的研究 [J]. 肿瘤防治研究, 2011, 38(11): 1280-1282.

[12] 王杰;奉典旭;陈超;倪振华;左青松;陈亚峰;王旭;张勇;陈腾 . 蟾毒灵对裸鼠大肠癌原位移植瘤的抗肿瘤作用及其对凋亡相关基因Bcl-xL、Bax表达的影响 [J]. 肿瘤防治研究, 2011, 38(10): 1121-1125.

[13] 郭瑞珍;周开梅;王燕. CyclinA、C-myc在皮肤瘢痕及瘢痕癌组织中的表达及意义 [J]. 肿瘤防治研究, 2011, 38(10): 1147-1150.

[14] 陈蕊;张莹;赵丽 . c-myc与c-myb基因在白血病中的研究进展 [J]. 肿瘤防治研究, 2011, 38(10): 1207-1210.

[15] 袁方均;周文波;邹灿;胡洪生;张志云;戴宗晴;张有顺. 肝癌细胞系中Oct4与Wnt/β-catenin 和TGF-β信号通路的相互影响[J]. 肿瘤防治研究, 2011, 38(1): 21-24.