miR-335、Survivin表达及对乳腺癌术后患者预后评估的价值

《现代肿瘤医学》[ISSN:1672-4992/CN:61-1415/R] 期数: 2019年13期 页码: 2303-2308 栏目: 论著（胸部肿瘤） 出版日期: 2019-05-31

Title: he value of miR-335 and Survivin expression on prognosis evaluation of patients with breast carcinoma after operation

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关键词: miR-335; Survivin; 乳腺癌; 生存期

Keywords: miR-335; Survivin; breast carcinoma; survival

分类号: R737.9

DOI: 10.3969/j.issn.1672-4992.2019.13.017

文献标识码: A

摘要: 目的：探讨微小RNA335(microRNA-335，miR-335)和Survivin在乳腺癌患者组织中表达情况以及其表达水平对患者预后的影响。方法：收集我院2010年2月1日至2014年2月1日乳腺癌患者标本140例，通过实时免疫荧光定量聚合酶链反应（RT-PCR)法检测所有乳腺癌组织、癌旁组织中miR-335的表达情况；采用免疫组织化学方法检测癌组织、癌旁组织中Survivin的表达情况。应用SPSS 16.0软件对比miR-335、Survivin与乳腺癌患者临床病理之间的关系，以及对患者预后的影响。结果：miR-335在癌组织中的表达明显低于癌旁组织(25.36% vs 82.51%，P=0.003)，Survivin在癌组织中的表达明显高于癌旁组织(80.13% vs 26.73%，P=0.001 6)，miR-335在乳腺癌组织中的表达水平与肿瘤病理类型、分化程度、临床分期呈负相关（r=-0.47，P=0.02；r=-0.31，P=0.03；r=-0.75，P=0.04)，而Survivin在乳腺癌组织中的表达水平与肿瘤病理类型、分化程度、临床分期呈正相关（r=0.52，P=0.03；r=0.63，P=0.01；r=0.37，P=0.03)。COX回归模型发现乳腺癌患者肿瘤TNM分期、淋巴结转移、分化程度、病理类型、ER、PR、Her-2、miR-335、Survivin表达均为影响乳腺癌患者PFS的因素。miR-335对于乳腺癌患者术后3年 PFS、OS预测曲线下面积分别为83.4%、78.6%(P<0.01)；Survivin 对于乳腺癌患者术后3年PFS、OS预测曲线下面积分别为79.5%、70.6%(P<0.01)。差异有统计学意义（P<0.01，P<0.01)。结论：miR-335、Survivin在乳腺癌组织和癌旁正常组织中的表达存在明显差异，miR-335高表达、Survivin低表达时，提示乳腺癌患者手术预后良好。

Abstract: Objective：To investigate the expression of microRNA-335 (miR-335) and Survivin in breast cancer patients' tissue and the effect of their expression levels on the prognosis of patients.Methods：A total of 140 specimens of breast cancer patients from Feb.1st，2010 to Feb.1st，2014 from our hospital were collected.Real-time immunofluorescence quantitative polymerase chain reaction (RT-PCR) was used to detect the expression of miR-335 in all specimens' tissue in cancer tissues and adjacent tissues.The immunohistochemistry was used to detect the expression level of Survivin in cancer tissues and adjacent tissues.SPSS 16.0 software was used to compare the relationship between miR-335，Survivin and clinical pathology of breast cancer patients，and the impact on patients' prognosis.Results：The expression of miR-335 in cancer tissues was significantly lower than that in adjacent tissues (25.36% vs 82.51%，P=0.003).The expression of Survivin in cancer tissues was significantly higher than that in adjacent tissues (80.13% vs 26.73%，P=0.001 6).The expression of miR-335 in breast cancer tissues was negatively correlated with tumor pathological type，differentiation degree and clinical stage (r=-0.47，P=0.02.r=-0.31，P=0.03.r=-0.75，P=0.04)，and the expression of Survivin in breast cancer tissues was positively correlated with tumor pathological type，differentiation degree and clinical stage (r=0.52，P=0.03.r=0.63，P=0.01.r=0.37，P=0.03).The COX regression model found that TNM stage，lymph node metastasis，differentiation degree，pathological type，ER，PR，Her-2，miR-335 and Survivin expression were all the factors affecting PFS in breast cancer patients.The area under the predictive curve of PFS and OS for miR-335 was 83.4% and 78.6%，respectively (P<0.01) for the patients who had surgery after 3 years.Survivin

was 79.5% and 70.6% (P<0.01) respectively for PFS and OS prediction curves 3 years after surgery.The difference was statistically significant (P<0.01，P<0.01).Conclusion：The expression of miR-335 and Survivin was significantly different in breast cancer tissues and adjacent normal tissues.The high expression of miR-335 and the low expression of Survivin indicated a good prognosis.

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备注/Memo: 河南省医学科技攻关计划联合共建项目（编号：201802078）；2018年南阳市科技发展计划（基础与前沿）项目（编号：JCQY2018004）

更新日期/Last Update: 2019-05-31