

乳腺导管内增生性病变中Skp2和p27kip1的表达及意义

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Significance of Expression of Skp2 and p27kip1 in Intraductal Proliferative Lesions in Breast

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- 摘要
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摘要

目的

从蛋白水平研究导管内增生性病变中Skp2和p27kip1表达异常与乳腺癌发生之间的相关性。方法采用免疫组织化学法分别检测120例导管内增生性病变,包括普通型导管上皮增生(usual ductal hyperplasia,UDH),平坦型上皮不典型性病变(flat epithelial atypia,FEA),不典型导管上皮增生(atypical ductal hyperplasia,ADH),导管原位癌(ductal carcinoma in situ,DCIS)各30例石蜡包埋组织,以及健康对照组中Skp2和p27kip1蛋白表达水平,分析比较四组病变中Skp2和p27kip1蛋白阳性

表达率以及这两种蛋白表达的相关性。结果四个亚型Skp2蛋白阳性表达率均高于健康对照组($P<0.05$),DCIS组、ADH组和FEA组

Skp2蛋白阳性表达率均高于UDH组($P<0.05$),DCIS组Skp2蛋白阳性表达率高于ADH组和FEA组($P<0.05$);p27kip1蛋白在UDH组

、FEA组、ADH组、DCIS组的阳性表达率均低于健康对照($P<0.05$),p27kip1蛋白在DCIS组阳性表达率低于UDH组、ADH组和FEA组

($P<0.05$)。Skp2与p27kip1阳性细胞率在四组导管内增生性病变中的蛋白表达阳性率总体上呈负相关($r=-0.411,P=0.000$)。

在UDH组与DCIS组内Skp2与p27kip1表达均呈负相关($r=-0.406,P=0.026;r=-0.544,P=0.002$)。结论Skp2蛋白表达水平升高

p27kip1蛋白水平下降与乳腺导管上皮不典型增生和乳腺癌发生相关。

关键词: 乳腺癌 导管内增生性病变 细胞周期调控 Skp2 泛素蛋白 p27kip1

Abstract:

Objective

To explore the relationship of abnormal expression of Skp2 and p27kip1 between intraductal proliferation lesions and breast cancer.MethodsThe positive expression ratio of Skp2 protein and p27kip1 protein in 30 cases of normal

control group,120 cases of intraductal proliferation lesions including 30 cases of usual ductal hyperplasia (UDH),30 cases flat epithelial atypia(FEA),30 cases of atypical ductal hyperplasia(ADH) and 30 cases of ductal carcinoma in situ(DCIS) were detected using immunohistochemical method.ResultsThe positive expression ratio of Skp2 in four subtypes were all higher than that in normal control ($P<0.05$).The positive expression ratio of Skp2 protein of DCIS,FEA and ADH were higher than that of UDH.There were significant difference between DCIS,FEA and

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ADH ($P<0.05$). The positive expression ratio of p27Kip1 in four subtypes were all lower than that in normal control ($P<0.05$). Remarkable difference of expression ratio of p27kip1 existed between UDH and DCIS ($P<0.05$), FEA and DCIS ($P<0.05$), ADH and DCIS ($P<0.05$). Skp2 protein level was reversely correlated with p27kip1 protein level overall ($r=-0.411, P=0.000$). The same results existed in UDH and DCIS, respectively ($r=-0.406, P=0.026; r=-0.544, P=0.002$). Conclusion The increase of expression level of Skp2 protein and decrease of expression level of p27kip1 protein have closed association with dysplasia of breast ductal epithelial and development of breast cancer.

Key words: Breast cancer Intraductal proliferation lesions Cell cycle regulation Skp2 Ubiquitin p27kip1

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