

SDC1及其相关蛋白RSPO1、WNT1、p16、WT1的表达对乳腺浸润性导管癌的预后价值分析

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Title: Prognostic value of SDC1 and the expression of RSPO1, WNT1, p16, WT1 for invasive ductal carcinoma of breast

作者: 景文江; 马武; 马军
汉中三二〇一医院肿瘤内科, 陕西 汉中 723000

Author(s): Jing Wenjiang; Ma Wu; Ma Jun
Department of Oncology, Hanzhong 3201 Hospital, Shaanxi Hanzhong 723000, China.

关键词: 乳腺浸润性导管癌; SDC1蛋白; 预后

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摘要: 目的: 探讨SDC1及相关蛋白在乳腺浸润性导管癌组织中的表达与预后的关系。方法: 运用免疫组织化学分析法检测80例乳腺浸润性导管癌患者癌组织中SDC1及其相关蛋白的表达, 分析其与临床病理特征的关系。结果: SDC1阳性表达率在雌激素受体阴性表达组显著高于雌激素受体阳性表达组 ($P=0.033$), WT1阳性表达率与肿瘤分期差异具有统计学意义 ($P=0.024$), RSPO1阳性表达率在孕酮受体阳性组显著高于孕酮受体阴性表达组 ($P=0.015$); RSPO1、WT1、p16的阳性表达与无瘤生存率显著相关 ($P<0.05$), 且其阳性表达时无瘤生存率较高; RSPO1、p16是影响无瘤生存率的因素, 差异有统计学意义 ($P<0.05$); SDC1的阳性表达与WNT1、WT1、p16的阳性表达呈显著正相关 ($rs>0, P<0.05$)。结论: RSPO1和p16蛋白的表达水平可以作为乳腺癌浸润性导管癌的独立预后指标; SDC1与WNT1、WT1、p16在乳腺浸润性导管癌中的表达呈显著正相关。

Abstract: Objective: To investigate the expression of SDC1 in the tissues of invasive ductal carcinoma of breast and its association with prognosis. Methods: The expression of SDC1, WNT1, WT1, RSPO1 and p16 among 80 invasive ductal carcinoma of breast cases were detected by immunohistochemical method, to explore its association with clinical pathological characteristics. Results: Higher positive expression rate of SDC1 was shown among women who had negative expression of estrogen receptors than those with positive expression of estrogen receptors ($P=0.033$). The positive expression rate of WT1 was associated with tumor grade ($P=0.024$), and higher expression rate of RSPO1 was found in women with positive progesterone receptors than those with negative progesterone receptors ($P=0.015$). The positive expression rate of RSPO1, WT1 and p16 were significantly associated with longer disease-free survival ($P<0.05$), especially for RSPO1 and p16 ($P<0.05$). Expression of SDC1 were positively associated with WNT1, WT1 and p16 ($rs > 0, P<0.05$). Conclusion: Expression of RSPO1 and p16 could be the independent prognostic indicators of invasive ductal cancer of breast. Expression of SDC1 were positively associated with the expression of WNT1, WT1, p16.

参考文献/REFERENCES

- [1] Siegel RL, Miller KD, Jemal A. Cancer statistics, 2018 [J]. *Ca A Cancer Journal for Clinicians*, 2018, 60(5): 277-300.
- [2] Miller KD, Siegel RL, Lin CC, et al. Cancer treatment and survivorship statistics, 2016 [J]. *CA: A Cancer Journal for Clinicians*, 2016, 66(4): 271-289.
- [3] Vardanjani HM, Heidari M, Hadipour M. Can we rely on GLOBOCAN and GBD cancer estimates case study of lung cancer incidence and mortality rates and trends in iran [J]. *Asian Pac J Cancer Prev*, 2016, 17(7): 3265-3269.
- [4] Li BJ, Zhu ZH, Wang JY, et al. Correlation study of expression of Ki67, p53, VEGF and c-ERBB-2 in breast cancer and its clinical significance [J]. *Chinese Journal of Cancer*, 2004, 23(10): 1176-1179.
- [5] Zhang Z, Ni C, Chen W, et al. Expression of CXCR4 and breast cancer prognosis: A systematic review and Meta-analysis [J]. *BMC Cancer*, 2014, 14(1): 49.

- [6] ZHANG K, XU EJ, YIN J, et al. Hypoxia-inducible factor -1A up-regulates HMGN5 expression and promotes distant metastasis of osteosarcoma [J]. *Modern Oncology*, 2019, 27(4): 556-560. [张珂, 徐恩杰, 尹佳, 等. 缺氧诱导因子-1A上调HMGN5表达并促进骨肉瘤远处转移机制的实验研究 [J]. *现代肿瘤医学*, 2019, 27(04): 556-560.]
- [7] WANG YY, ZHU XF, XUE YL, et al. Diagnostic value and clinical significance of blood coagulation and tumor marker in colorectal cancer [J]. *Modern Oncology*, 2019, 27(4): 615-618. [王玉颖, 朱晓峰, 薛玉玲, 等. 联合检测凝血4项和肿瘤标志物在结直肠癌中的临床意义和诊断价值 [J/OL]. *现代肿瘤医学*, 2019, 27(04): 615-618.]
- [8] Kim H, Choi DS, Chang SJ, et al. The expression of syndecan-1 is related to the risk of endometrial hyperplasia progressing to endometrial carcinoma [J]. *Journal of Gynecologic Oncology*, 2010, 21(1): 50-55.
- [9] Peurala E, Koivunen P, Haapasaari KM, et al. The prognostic significance and value of cyclin D1, CDK4 and p16 in human breast cancer [J]. *Breast Cancer Research Bcr*, 2013, 15(1): R5.
- [10] Purushothaman A, Uyama T, Kobayashi F, et al. Heparanase-enhanced shedding of syndecan-1 by myeloma cells promotes endothelial invasion and angiogenesis [J]. *Blood*, 2010, 115(12): 2449-2457.
- [11] Wieczorek M, Paczkowska A, Guzenda P, et al. Silencing of Wnt-1 by siRNA induces apoptosis of MCF-7 human breast cancer cells [J]. *Cancer Biology & Therapy*, 2008, 7(2): 268-274.
- [12] Nakashima T, Liu D, Nakano J, et al. Wnt1 overexpression associated with tumor proliferation and a poor prognosis in non-small cell lung cancer patients [J]. *Oncology Reports*, 2008, 19(1): 203-209.
- [13] Nieves María Gabrielli, María Florencia Veiga, María Laura Matos, et al. Expression of dysadherin in the human male reproductive tract and in spermatozoa [J]. *Fertility & Sterility*, 2011, 96(3): 554-561.
- [14] Ohtani N, Yamakoshi K, Takahashi A, et al. The p16INK4a-RB pathway: Molecular link between cellular senescence and tumor suppression [J]. *The Journal of Medical Investigation*, 2004, 51(3, 4): 146-153.
- [15] Ramani VC, Pruett PS, Thompson CA, et al. Heparan sulfate chains of syndecan-1 regulate ectodomain shedding [J]. *Journal of Biological Chemistry*, 2012, 287(13): 9952-9961.

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