

Twist下调影响卵巢癌细胞株A2780顺铂敏感性的研究

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Title: Effect of Twist downregulation on cisplatin sensitivity of ovarian cancer cell line A2780

作者: 马园园^{1, 2}; 毛小梅¹; 乔谷媛¹; 吕小慧¹; 张晓红¹; 姚芳²; 王建¹

1.空军军医大学西京医院妇科, 陕西 西安 710032;2.榆林市子洲县人民医院妇产科, 陕西 榆林 718400

Author(s): Ma Yuanyuan^{1, 2}; Mao Xiaomei¹; Qiao Guyuan¹; Lv Xiaohui¹; Zhang Xiaohong¹; Yao Fang²; Wang Jian¹

1.Department of Gynaecology,Xijing Hospital,Air Force Military Medical University,Shaanxi Xi'an 710032,China;2.Department of Obstetrics and Gynaecology of Yulin Zizhou People's Hospital,Shaanxi Yulin 718400,China.

关键词: 上皮性卵巢癌; Twist; 顺铂敏感性; 增殖; 凋亡

Keywords: epithelial ovarian cancer; Twist; cisplatin sensitivity; proliferation; apoptosis

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摘要: 目的: 探讨Twist对卵巢癌细胞株A2780顺铂敏感性及其细胞增殖凋亡的影响。方法: 通过Western blot筛选细胞株, 构建小干扰RNA, qPCR筛选Twist-siRNA, 将构建成功的Twist-siRNA逆转录于上皮性卵巢癌细胞株A2780中, 通过CCK-8细胞术及流式细胞术, 研究下调Twist对卵巢癌细胞株的增殖、凋亡及对化疗药物顺铂的影响。结果: 选择人卵巢癌细胞株A2780, 引入小干扰RNA后, Twist表达降低; 细胞的增殖能力下降, 凋亡增加(P<0.05), 差异有统计学意义。si-Twist组相比对照组Twist基因的表达量明显降低, 且呈现一定的顺铂浓度依赖性差异(P<0.05)。结论: 下调Twist可抑制卵巢癌细胞A2780的增殖, 促进其凋亡; 下调Twist卵巢癌细胞A2780对顺铂的敏感性增加。

Abstract: Objective: To investigate the effect of Twist on cisplatin sensitivity and cell proliferation and apoptosis of ovarian cancer cell line A2780. Methods: Western blot was used to screen cell lines and construct small interfering RNA. qPCR was used to screen Twist-siRNA. The constructed Twist-siRNA was retro-transcribed into epithelial ovarian cancer cell line A2780. Results: Human ovarian cancer cell line A2780 was selected, and Twist expression was decreased after small interfering RNA was introduced. The proliferation ability of cells decreased and apoptosis increased (P<0.05), and the difference was statistically significant. Conclusion: Down-regulation of Twist could inhibit the proliferation and promote the apoptosis of ovarian cancer cells A2780. The sensitivity of Twist ovarian cancer cells A2780 to cisplatin increased.

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