

论著

膀胱癌雌激素受体表达与他莫昔芬拮抗治疗的研究

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摘要 背景与目的: 探讨他莫昔芬(TAM)联合阿霉素(ADM)对膀胱癌BIU-87细胞株生长的抑制作用。材料与方法: 采用免疫组织化学法检测雌激素受体的表达; 应用MTT法测定不同浓度的TAM(1、5、10 μmol/L)及ADM(0.1、1、10 μmol/L), 单独和联合作用对BIU-87细胞的生长抑制率, 观察TAM的增敏作用; 采用原位杂交法检测各实验组bcl-2 mRNA的水平。结果: 膀胱癌BIU-87细胞表达雌激素受体; TAM单独作用在低浓度时(1 μmol/L)对BIU-87生长无抑制作用; TAM联合ADM作用时, 对BIU-87细胞生长的抑制率增加, 其中TAM 10 μmol/L组增加显著(P<0.05), 显示TAM能提高ADM的敏感性, 起到化疗的增敏作用; 随着TAM浓度的增加和时间的延长, BIU-87细胞bcl-2 mRNA的表达下调。结论: 他莫昔芬能增加膀胱癌细胞株BIU-87对化疗药物ADM的敏感性, 并抑制细胞增殖; 其增敏的作用机制可能与bcl-2的表达下调有关。

关键词 [他莫昔芬](#) [膀胱肿瘤](#) [bcl-2](#) [雌激素受体](#)

A Study on the Expression of Estrogen Receptor and the Effect of Tamoxifen Treatment in Bladder Cancer

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Abstract BACKGROUND AND AIM: In this study we tried to evaluate the possible effects on chemosensitization of bladder cancer cell line BIU-87. MATERIALS AND METHODS: The expression of estrogen receptor(ER) was evaluated by immunohistochemical S-P method. In vitro chemosensitivity tests were done with bladder cancer cell line BIU-87 and Doxorubicin(0.1,1,10 μmol/L) in the presence or absence of graded concentrations of Tamoxifen(1,5,10 μmol/L). The growth and the sensitivity to Tamoxifen of cells were investigated by MTT assay. The level of bcl-2 gene mRNA expression was determined by in situ hybridization. RESULTS: Immunohistochemistry showed positive ER in BIU-87 cells. Tamoxifen stimulated a concentration- dependent and time-dependent decrease in bcl-2 mRNA. Tamoxifen at concentrations of 5 and 10 μmol/L significantly enhanced the cytotoxicity of the chemotherapeutic agent to the cell lines. Tamoxifen alone caused significant toxic effects to BIU-87 at 10 μmol/L. Tamoxifen at 5 and 10 μmol/L down-regulated the secretion of bcl-2 in a concentration-dependent manner. The effect of chemosensitization was evident in cells treated with 1,5 and 10 μmol/L Tamoxifen plus Doxonubicin in which 1.77 to 6.96-fold IC50 reduction was observed. CONCLUSION: Tamoxifen increased the chemosensitivity of Tamoxifen in human bladder cancer BIU-87 cell line in vitro, inhibited cell proliferation and promoted apoptosis.

Keywords [Tamoxifen](#), [bladder neoplasms](#), [bcl-2](#), [estrogen receptor](#)

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