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论著

TRAIL途径在维生素E琥珀酸酯诱导人胃癌细胞凋亡中的作用

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摘要 背景与目的： 探讨TRAIL途径在维生素E琥珀酸酯(VES)所诱导的人胃癌MKN28细胞凋亡过程中的作用。 材料与方法： 人胃癌MKN28细胞，分为VES不同浓度(5、10、20 μg/ml)作用的3个实验组，和溶剂对照组(乙醇)，共4组。各组受试物作用细胞24 h后，采用DAPI染色法观察VES诱导细胞凋亡的情况；采用Western Blot分析VES各实验组不同作用时间(0、6、12、18、24 h)对MKN28细胞的TRAIL相关蛋白(DR4、DR5、DcR1和DcR2)表达的影响。 结果： VES明显诱导MKN28细胞凋亡，5、10、20 μg/ml实验组VES作用MKN28细胞12 h，其DR4和DR5表达增强，而DcR1和DcR2的表达下降；当10 μg/ml 浓度组VES作用细胞时，随着时间的延长，DR4和DR5的表达逐渐增强，12 h达到峰值。 结论： TRAIL途径可能参与了VES诱导的MKN28细胞凋亡。

关键词 TRAIL； 维生素E琥珀酸酯； 人胃癌MKN28细胞； 细胞凋亡

Roles of TRAIL in Vitamine Succinate-induced Apoptosis in Human Gastric Cancer Cells

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Abstract BACKGROUND AND AIM: In order to investigate the roles of TRAIL in vitamin E succinate (VES)-induced apoptosis in human gastric cancer MKN28 cells. MATERIALS AND METHODS: The MKN28 huamn gastric cancer cells were cultured with different concentrations of VES.The MKN28 cells were divided into four groups:5,10,20 μg/ml VES and control groups. Apoptosis was assessed by DAPI staining, and TRAIL-receptor(DR4,DR5,DcR1 and DcR2) protein expressions induced by VES at different doses and different time points were measured by western blot. RESULTS: The results showed that VES obviously induced cells to undergo apoptosis.The expression of DR4 and DR5 were increased by VES at 5,10,20 μg/ml for 12 h; however the expression of DcR1 and DcR2 were reduced .DR4 and DR5 were increased by the hour,then reached the top level at 12 h. CONCLUSION: The data implicated that TRAIL pathway might be invovled in VES-induced apoptosis.

Keywords TRAIL； Vitamin E succinate； human gastric cancer MKN28； apoptosis

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