

论著

DADS抑制裸鼠肝癌HePG2细胞移植瘤的实验研究

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摘要:

目的: 初步探讨二烯丙基二硫化物(DADS)对肝癌细胞的抑制效应及其相关机制。方法: 以HepG2细胞为研究对象, 进行裸鼠成瘤实验。观察DADS对裸鼠成瘤的影响并绘制生长曲线。应用免疫组织化学方法和Western 印迹技术检测细胞增殖和凋亡相关蛋白的表达, 应用TUNEL检测细胞凋亡情况。结果: DADS可抑制裸鼠移植瘤的生长。TUNEL实验结果提示DADS可促进HepG2细胞凋亡。DADS也可促进促凋亡蛋白caspase-3表达并抑制抑凋亡蛋白bcl-2表达和PCNA的表达。结论: DADS可抑制肝癌HepG2细胞在裸鼠体内的生长, 与促进细胞凋亡和抑制细胞增殖有关。

关键词: DADS 肝癌 细胞增殖 细胞凋亡

Inhibitory effect of DADS on transplantation tumor from hepatic carcinoma HePG2 cells in nude mice

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Abstract:

Objective To investigate the inhibitory effect of diallyl disulfide (DADS) on transplantation tumor from hepatic carcinoma HePG2 cells in nude mice and its mechanism. Methods Hepatic carcinoma HePG2 cell transplantation tumor model in nude mice was established and the effect of DADS on the growth of transplantation tumor was observed. Cell apoptosis and proliferation associated protein expressions were assayed by immunohistochemical method and Western blot. Cell apoptosis was assayed by TUNEL. Results DADS could inhibit HePG2 cell transplantation tumor growth in nude mice. TUNEL showed that DADS enhanced the cell apoptosis and apoptosis-promoting protein caspase-3 expression, decreased apoptosis-inhibiting protein bcl-2 expression, and also inhibited proliferation associated protein PCNA expression. Conclusion DADS may inhibit HePG2 cell transplantation tumor growth in nude mice and involve in the inhibition of cell proliferation and enhancement of cell apoptosis.

Keywords: DADS ; hepatic carcinoma; cell proliferation; cell apoptosis

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