

苹果多糖抑制人结肠癌细胞SW-620转移的作用及机制研究

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Title: Effects of apple polysaccharides on metastasis of human colon cancer cells SW-620 and the possible mechanisms

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关键词: 结肠癌; 苹果多糖; 侵袭; 迁移; E-cadherin; N-cadherin

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摘要: 目的:研究苹果多糖对人结肠癌SW-620细胞侵袭与迁移的影响及相关机制。方法:培养人结肠癌SW-620细胞,分别加入苹果多糖(0.1,0.3 mg/ml) 24 h后,使用transwell小室、划痕实验观察苹果多糖对SW-620细胞侵袭与迁移的影响,以免疫印迹法检测细胞中E-cadherin, N-cadherin的表达变化。结果:苹果多糖可以有效地抑制SW-620细胞的侵袭与迁移,浓度依赖性地上调E-cadherin、下调N-cadherin的蛋白表达。结论:苹果多糖可有效地阻遏结肠癌细胞SW-620的侵袭与迁移,其可能机制与其升高E-cadherin、降低N-cadherin的表达水平有关。

Abstract: Objective:To investigate the effects of apple polysaccharides (AP) on the invasion and migration of colon cancer cells SW-620 and explore the possible mechanisms.Methods:SW-620 cells were treated with different concentrations of AP (0.1 or 0.3 mg/ml).Cell invasion and migration were then evaluated by transwell and wound healing assays.The effect of AP on the protein expression of E-cadherin and N-cadherin was investigated by Western blot.Results:AP suppressed the invasion and migration of SW-620 cells significantly.It could reduce the expression of N-cadherin and increase the expression of E-cadherin in a concentration dependent manner.Conclusion:AP inhibited SW-620 metastasis,at least partly,by affecting the expression of E-cadherin and N-cadherin.

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