山东大学学报(医学版) 2010, 48(10) 111-115 DOI: ISSN: 1671-7554 CN: 37-1390/R

论文

肝细胞生长因子和血管内皮生长因子C在非小细胞肺癌中的共表达及与淋巴管生成的相关性

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摘要：

目的 检测肝细胞生长因子（HGF）和血管内皮生长因子C（VEGF-C）在非小细胞肺癌（NSCLC）组织中的表达，分析两者的相关性及其与NSCLC淋巴管生成的关系。方法 应用免疫组织化学SP法,检测72例NSCLC患者及20例癌旁正常肺组织中HGF和VEGF-C的表达，用D2-40标记淋巴管,计数微淋巴管密度（LMVD），分析HGF和VEGF-C共表达情况及与LMVD和临床病理参数之间的关系。结果 HGF和VEGF-C在NSCLC中癌组织的表达明显高于癌旁正常肺组织（31.94% vs 15.00%、48.65% vs 25.00%, P均＜0.05），且两者存在明显正相关（r＝0.170，P＜0.05）；HGF或VEGF-C阳性表达的LMVD显著增高［HGF:(16.98±4.31) vs (13.06±4.28), P＜0.05; VEGF-C:(19.43±3.24) vs (14.66±3.51), P＜0.05］，且与患者淋巴结转移成正相关（P均＜0.05）。结论 HGF和VEGF-C在NSCLC中存在共表达，且两者均与肿瘤淋巴管的生成及淋巴道的转移密切相关。

关键词： 癌；非小细胞肺；肝细胞生长因子；血管内皮生长因子C；淋巴管生成

Co-expression of hepatocyte growth factor and vascular endothelial growth factor-c in non-small cell lung cancer and their relationship with lymphangiogenesis

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Abstract:

Objective To determine expressions of hepatocyte growth factor (HGF) and vascular endothelial growth factor-c (VEGF-C) and their relevance, and evaluate the relationship with lymphangiogenesis in non-small cell lung cancer(NSCLC). Methods Applying the immunohistochemical SP method, lymphatic vessels and expressions of HGF and VEGF-C were detected in 72 non-small cell lung cancer tissues and 20 adjacent normal tissues. Lymphatic micro-vessel density (LMVD) was counted with D2-40 as the specific marker of the lymphatic endothelium. The relationship of HGF and VEGF-C with LMVD and the clinicopathological features of NSCLC were then analyzed. Results HGF/VEGF -C positive expression rates were significantly higher than those in adjacent normal tissues（31.94% vs 15.00%, 48.65% vs 25.00%, both P＜0.05）, and there was a positive correlation between expressions of HGF and VEGF-C（r =0.170，P＜0.05）.Higher LMVD was found in NSCLC with HGF or VEGF-C positive expression ［HGF:(16.98±4.31) vs (13.06±4.28), P＜0.05; VEGF-C: (19.43±3.24) vs (14.66±3.51), P＜0.05］. Expressionsof HGF and VEGF-C were positively correlated with lymph node metastasis (both P＜0.05). Conclusion In non-small cell lung cancer, co-expression of HGF and VEGF-C can promote lymphangiogenesis and lymphatic metastasis.

Keywords: Carcinoma, non-small cell lung; Hepatocyte growth factor; Vascular endothelial growth factor-C

收稿日期 2010-06-08 修回日期 网络版发布日期

DOI:

基金项目:

济南市科技明星计划资助课题（济青科合字2007第1-115号）

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