

MMP-9和MMP-2基因多态性与原发性肝癌侵袭转移的关系

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Correlation of MMP-9 and MMP-2 Gene SNPs with Hepatocellular Carcinoma Invasion and Metastasis

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摘要

目的

探讨原发性肝癌中MMP-9和MMP-2基因多态性表达与原发性肝癌侵袭转移的关系。方法用聚合酶链反应—限制性片断长度多态性技术,检测MMP-2和MMP-9启动子基因型在28例原发性肝癌患者(其中8例有转移)和42例健康者中的频率。结果与携带MMP-9-1562CC和CT基因型相比,携带MMP-9-1562TT基因型者早期发生侵袭转移的风险增加1.25倍(95%CI: 3.64~5.69),且这种风险增高与研究对象的年龄和性别无关,同时携带MMP-9-1562TT和MMP-2-1306CC或CT基因型的个体,患肝癌的风险性较单一携带的个体显著增高(P<0.5)。结论MMP-2-1306T/C多态性单独与原发性肝癌风险无关,但与MMP-9-1562C/T多态性可能有基因-基因交互作用。MMP-2和MMP-9基因多态性与原发性肝癌侵袭转移可能相关。

关键词: 原发性肝癌 MMP-2 MMP-9 基因多态性

Abstract:

Objective

To investigate the association between MMP-9 and MMP-2 gene SNPs of promoter regions and both infiltration and metastasis in hepatocellular carcinoma. Methods PCR-restriction fragment length polymorphism (PCR-RFLP) technique was applied to detect MMP-2 and MMP-9 promoter SNPs in 28 patients with hepatocellular carcinoma (8 cases with metastasis) and 42 healthy people. Results The risk of early metastasis of MMP-9-1562TT genotype was increased up to 1.25-fold (95%CI, 3.64-5.69), compared with MMP-9-1562CC or CT genotype, and irrelevant to the age or gender of patients. The risk of liver cancer in population harboring MMP-9-1562TT and MMP-2-1306CC or CT genotypes was significantly higher than in those harboring MMP-9-1562TT, MMP-2-1306CC or TT alone. Conclusion MMP-2-1306T/C polymorphism alone is not a risk factor of primary liver cancer, although has synergistic interactions with MMP-9-1562C/T genotype, MMP-2 and MMP-9 gene polymorphism are related to the infiltration and metastasis of primary liver cancer.

Key words: Hepatocellular carcinoma) " href="#">

Hepatocellular carcinoma Matrix metalloproteinases-9 Matrix metalloproteinases-2 polymorphism

) " href="#">Single nucleotide

polymorphism

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