

论著

应用基因芯片分析HLA-DRB与晚期肝脾型日本血吸虫病的相关性

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摘要

目的 探讨人类白细胞抗原II类(HLA-II)基因多态性与晚期肝脾型日本血吸虫病的遗传关联性。方法 应用基因芯片分析技术对武汉市蔡甸45例晚期肝脾型日本血吸虫病患者(实验组)和44例慢性日本血吸虫病患者(对照组)的HLA-II基因DRB位点等位基因进行基因分型,并比较两组各等位基因频率以及与晚期肝脾型日本血吸虫病的相关性。结果 实验组HLA-DRB1*04x等位基因频率明显高于对照组(P<0.01, RR=3.928),而对照组HLA-DRB1*15x等位基因频率明显高于实验组(P<0.01, RR=0.050)。等位基因DRB1*15x总与DRB5*010x/020x连锁,对照组DRB1*15x-DRB5*010x/020x连锁体频率明显高于实验组(P<0.01)。结论 HLA-DRB1*04x与晚期肝脾型日本血吸虫病呈正相关,而HLA-DRB1*15x与晚期血吸虫病呈负相关。

关键词 [肝脾型血吸虫病](#) [人类白细胞抗原基因DRB位点](#) [基因芯片](#)

分类号

Microarray DNA Chip in Analyzing the Association Between HLA-DRB and Advanced Hepatosplenic Schistosomiasis

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Abstract

Objective To explore possible associations between host polymorphism of HLA class II genotypes and advanced hepatosplenic schistosomiasis japonica. Methods 45 advanced schistosomiasis patients (experimental group) and 44 age- and sex-matched patients with chronic schistosomiasis (control group) from the same area were investigated for their HLA class II gene DRB genotypes by genotyping the alleles using microarray DNA chip. The correlation of allele frequencies to advanced hepatosplenic schistosomiasis was compared for the two groups. Results HLA-DRB1*04x exhibited markedly higher frequency in advanced patients than that in control group (P<0.01, RR=3.928). In contrast, the frequency of HLA-DRB1*15x in advanced patients was much lower when compared with that in control group (P<0.01, RR=0.050). Besides, the significant allele HLA-DRB1*15x displayed concurrence with allele DRB5*010x/020x. The linked gene haplotype DRB1*15x-DRB5*010x/020x showed significantly higher incidence in control group than in experimental group (P<0.01). Conclusion Allele HLA-DRB1*04x is positively, while HLA-DRB1*15x is negatively, correlated with advanced hepatosplenic schistosomiasis.

Key words [Hepatosplenic schistosomiasis](#) [HLA-DRB](#) [DNA chip](#)

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