

论著

肥胖者HDL亚类组成与载脂蛋白E基因多态性的关系

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摘要 目的: 探讨肥胖者血清载脂蛋白E基因多态性与HDL亚类组成的关系。方法: 采用聚合酶链反应-限制性片段长度多态性和双向电泳-免疫印迹检测法, 分析93例肥胖者和96例非肥胖者者的apoE基因型、HDL各亚类组成及相对含量。结果: 肥胖组和对照组apoE基因型及等位基因频率分布均以E3/3和ε3最高。肥胖者等位基因ε2携带者血清apoE/CIII、HDL2a较等位基因ε3和ε4携带者升高, 而apoB100、apoCIII、HDL3c则较ε3携带者下降, 差异显著 (P<0.05)。对照组中等位基因ε2携带者血清TC、apoE较等位基因ε3携带者升高, 等位基因ε2携带者HDL3b较等位基因ε3携带者降低, 差异显著 (P<0.05)。结论: apoE 基因多态性与HDL亚类的组成和分布相关,ε2等位基因有减缓肥胖者HDL颗粒变小的作用。

关键词 [脂蛋白类HDL](#); [载脂蛋白E类](#); [基因多态性](#); [肥胖症](#); [人体质量指数](#)

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The relationship between high density lipoprotein subclasses and apoE gene polymorphism in obese subjects

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Abstract

AIM: The purpose of this study is to elucidate the relationship between apolipoprotein (apo) E polymorphism and plasma lipid profiles and HDL subclasses in obesity. METHODS: apoE genotype was assayed by polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP). The subclasses of serum HDL in 93 obese subjects and 96 nonobese subjects were determined by two-dimensional gel electrophoresis conjunction with immunodetection method. RESULTS: apoE3/3 genotypes and allele ε3 frequency in obese group and the control group were both the highest, but no significant difference. In obese group, the genotype of apoE2 had higher serum apoE/aopCIII, HDL2a and lower apoB100, apoCIII, HDL3c levels compared with the genotype of apoE3 (P<0.05). In control group, the genotype of apoE2 had higher serum TC and apoE levels, but lower HDL3b level compared with the genotype of apoE3 (P<0.05). CONCLUSION: Polymorphism of the ApoE gene is associated with the distribution of HDL particles in obesity. Allele of ε2 carrier may slow the tendency of HDL particals shifted towards smaller sizes.

Key words [Lipoproteins](#) [HDL](#) [Apolipoproteins E](#) [Gene polymorphism](#) [Obesity](#) [Body mass index](#)

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