

# 载脂蛋白E基因多态性与2型糖尿病脑梗死的关系 Association Study of Apolipoprotein E Gene Polymorphism and Cerebral Infarction in Type 2 Diabetic Patients

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**摘要** 研究载脂蛋白E (ApoE) 基因多态性与中国东北汉族2型糖尿病合并脑梗死的关系。采用聚合酶链反应-限制性片段长度多态性 (PCR-RFLP) 技术, 检测了208个个体的ApoE基因多态性, 其中对照 (CON) 组69例, 2型糖尿病无大血管病变 (T2DM) 组67例和2型糖尿病合并脑梗死 (T2DMCI) 组72例; 同时测定了其中70例T2DMCI患者的血脂含量。CON组等位基因频率为: ε2 9.6%、ε3 82.4%、ε4 8.1%, 基因型频率为: ε2ε3 13.2%、ε3ε3 67.6%、ε3ε4 16.2%; T2DM组等位基因频率为: ε2 10.5%、ε3 84.3%、ε4 5.2%, 基因型频率为: ε2ε3 19.4%、ε3ε3 70.1%、ε3ε4 4.2%; T2DMCI组等位基因频率为: ε2 11.8%、ε3 84.7%、ε4 3.5%, 基因型频率为: ε2ε3 15.2%、ε3ε3 75%、ε3ε4 4.2%。3组间等位基因和基因型频率的差异经检验无统计学意义。T2DMCI患者中各基因型之间的血浆总胆固醇 (TC)、甘油三酯 (TG)、高密度脂蛋白胆固醇 (HDL-C) 和低密度脂蛋白胆固醇 (LDL-C) 水平亦无显著性差异。在中国东北汉族人群中, 未发现ApoE基因多态性与T2DMCI之间存在关联, 亦未发现ApoE基因多态性与T2DMCI患者的TC、TG、HDL-C和LDL-C水平之间存在关联。  
**Abstract:** In order to explore the association of apolipoprotein E (ApoE) gene polymorphism with cerebral infarction in type 2 diabetic patients of Han nationality in Northeast China, the genotypes of ApoE gene were analyzed by polymerase chain reaction - restriction fragment length polymorphism (PCR-RFLP) in the 208 cases, including 69 cases in control (CON) group and 67 in type 2 diabetes mellitus (T2DM) group as well as 72 in type 2 diabetes mellitus with cerebral infarction (T2DMCI) group. Plasma lipid content in T2DMCI was also detected for 70 cases. The distribution of genotypes in ApoE gene, ε2ε3, ε3ε3 as well as ε3ε4 was no significant difference in three groups (ε2ε3 : 13.2%、ε3ε3 : 67.6%、ε3ε4 : 16.2% in CON group; ε2ε3 : 19.4%、ε3ε3 : 70.1%、ε3ε4 : 4.2% in T2DM group; ε2ε3 : 15.2%、ε3ε3 : 75%、ε3ε4 : 4.2% in T2DMCI group). The allele frequencies of ε2, ε3 and ε4 were not significantly different in the three groups, either (ε2 : 9.6%、ε3 : 82.4%、ε4 : 8.1% in CON group; ε2 : 10.5%、ε3 : 84.3%、ε4 : 5.2% in T2DM group; ε2 : 11.8%、ε3 : 84.7%、ε4 : 3.5% in T2DMCI group). The levels of total cholesterol (TC), tryglyceride (TG), high density lipoprotein-cholesterol (HDL-C) and low density lipoprotein-cholesterol (LDL-C) were not significantly different among the different genotypes in T2DMCI group. The study confirmed that the polymorphisms of ApoE gene are neither associated with the T2DMCI, nor with the levels of plasma lipid in T2DMCI.

**关键词** [载脂蛋白E](#) [基因多态性](#) [2型糖尿病](#) [脑梗死](#) **Key words** [apolipoprotein E](#) [gene polymorphism](#) [type 2 diabetes mellitus](#) [cerebral infarction](#)

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