

NQO1基因多态性与客家人群食管癌易感性关系的探讨

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Title: Relationship between NQO1 genetic polymorphism and susceptibility of esophageal cancer in Hakkaness

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摘要: 目的: 通过对醌氧化还原酶 (NQO1) 基因多态性与客家人群食管癌遗传易感性关系的研究, 探讨遗传因素在该人群食管癌发病中的作用。方法: 采取病例-对照分子流行病学研究方法, 选择经病理检查确诊后的梅州地区客家人群122例食管癌患者(食管癌组)和同时期123例正常对照人群 (正常对照组), 对NQO1基因rs1800566、rs10517、rs1437135共3个位点进行基因型及等位基因检测, 分析其在两组间的分布特征。结果: NQO1基因3个位点在梅州地区客家人群中均存在多态性的改变, 但两组的基因型和等位基因分布频率差异均无统计学意义 (P>0.05)。经性别、年龄分层分析结果显示也无显著性差异。同时对影响食管癌发生的多种因素研究显示, 吸烟、饮酒、经常食用腌制食品、喜热烫饮食以及有消化道肿瘤家族史与食管癌发病呈正相关, 其中, 有消化道肿瘤家族史可能是该地区人群发生食管癌的最危险因素。结论: NQO1基因rs1800566、rs10517和rs1437135位点多态性可能与客家人群食管癌的易感性无关, 而环境因素中饮酒、吸烟、常食腌制食品等可能是该地区食管癌发病的危险因素。

Abstract: Objective: Through the research of the relationship between NQO1 genetic polymorphism and susceptibility of esophageal cancer in Hakkaness to explore the role of genetic factors in esophageal cancer. Methods: A case-control study was performed with the molecular epidemiological methods. A total of 122 esophageal cancer cases (as the esophageal cancer group) and 123 healthy people (as the control group) were randomly selected from Hakkaness in Meizhou area. Results: The genotypes and alleles of NQO1 rs1800566, rs10517, rs1437135 in both of the above groups had detected, and then analysis of the distribution gene had characteristics between the two groups. Studies on various factors affecting the occurrence of esophageal cancer showed smoking, drinking, regular consumption of preserved food, hi-hot diet, and family history of digestive tract cancer were positively correlated with the incidence of esophageal cancer. Among them, family history of digestive tract cancer may be the most risk factor for esophageal cancer in this population. Conclusion: The study shows that the genetic polymorphisms of NQO1 gene is possibly not related with the susceptibility of esophageal cancer in Hakkaness in Meizhou area, and a variety of pathogenesis-related factors including family history of digestive tract cancer, drinking, smoking, and pickled foods may be risk factors for the onset of esophageal cancer in the area.

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