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-11		문 한국인 알콜 중독자의 Aldehyde Dehydrogenase II 와 Arylsulfatase A의 유전자형 분포
제	목	Genotype Distribution of Aldehyde Dehydrogenase II and Arylsulfatase A in Korean Alcoholics
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진행 상	3 }	연구완료(0), 연구중() → 완료 예정 시기 :

1. Objectives

Genetic factors play roles in the etiology of alcohol dependence. Aldehyde dehydrogenase II (ALDH2) and arylsulfatase A (ASA) polymorphisms were suggested to be associated with alcohol dependence as candidate genes. This study was performed to investigate effects of ALDH2 and ASA gene polymorphisms and their interaction on alcohol dependence.

2. Methods

Polymerase chain reaction and restriction fragment length polymorphism were used to determine the genotype and allele frequencies of 128 male hospitalized patients with alcohol dependence. One hundred and twenty-eight healthy male subjects were matched to patients with alcohol dependence within 3 years of age. Polymorphic distributions of ALDH2 and ASA genes were compared between the age-matched 128 patient-control pairs. For evaluation of the effect of ASA polymorphism on alcohol dependence in individuals with homozygous for ALDH2*1, 149 male subjects homozygous for ALDH2*1 were selected as controls. The associations of gene polymorphisms and clinical characteristics were explored in alcoholic patients.

3. Results

The ALDH2 genotype frequency in alcoholic patients was significantly different from that of the age-matched controls. Even though the difference in the genotype frequencies for ASA polymorphisms between alcoholic patients and controls was not found in 128 age-matched pairs, a significant association of ASA polymorphism at N-glycosylation site and alcohol dependence was shown between cases and controls both homozygous for ALDH2*1. There was no association of gene polymorphisms and clinical characteristics in alcoholic patients.

4. Conclusions

These results indicate that ALDH2*2 allele lowers the risk of alcohol dependence and that the pseudodeficient ASA gene might affect the risk of alcohol dependence within population homozygous for ALDH2*1.