Editorial

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Genetic polymorphisms associated with alcohol dependence in a Japanese archipelago population.

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The paper is by Mikami et al., entitled: "Association between delta opioid receptor gene polymorphisms and alcohol dependence in a Japanese archipelago population". The genetic relevance of alcohol dependence in a Japanese archipelago population is examined in terms of genetic polymorphisms of delta opioid receptors associated with alcohol-mediated processes in the brain.

It is clear that genes are involved in causing alcohol dependence. It is known that Single Nucleotide Polymorphisms (SNPs) of alcohol dehydrogenase 1B (*ADH1B*) and aldehyde dehydrogenase 2 (*ALDH2*), which are involved in alcohol metabolism, markedly influence the susceptibility to alcohol dependence. A number of other genes have been reported to be involved in alcohol dependence, including a polymorphism (rs6265) in the brain-derived neurotrophic factor (*BDNF*) gene.

It was suggested that *OPRD1* gene polymorphisms (rs 678849 and rs 2234918) may not be associated with alcohol dependence in the Japanese archipelago population. However, since different results may be obtained by increasing the size of the sample, we look forward to future studies on this.

The elucidation of genetic associations in alcohol dependence may lead to the identification of new therapeutic targets and development of therapeutic agents.