



Psychiatry & Behavioral Science Section – 2010

I16 Association Study Between the SNAP-25/ STX1A Genes and Alcoholism

Duarte N. Vieira, PhD, National Institute of Legal Medicine, Largo da Sé Nova, Coimbra, 3000-356, PORTUGAL*

By attending this presentation, attendees will learn about the SNAP-25 and STX1A genes, which do not appear to be associated with alcoholism in a Portuguese population.

This presentation will impact the forensic science community by identifying genes that were postulated to predispose Portuguese individuals to alcohol dependence.

Excessive alcohol consumption contributes to numerous health problems, such as high blood pressure, heart attacks, obesity and suicide, and also increases the frequency of traffic accidents. In Portugal, alcohol is estimated to be the fourth most common cause of death. Epidemiological studies suggest that alcohol dependence has a genetic component and some evidence suggests that changes in exocytotic machinery may be involved in this disorder. However, to date no genetic studies have been performed in order to investigate the relationship between "exocytotic-machinery" genes and alcoholism. The aim of this study was to investigate the association (or lack thereof) between polymorphisms of the SNAP-25/STX1A genes and alcoholism in the Portuguese population.

Genomic DNA was extracted from peripheral lymphocytes by using enzymatic methods. Genotyping of the SNAP-25 and STX1A genes was performed using conventional PCR methods. The statistical analysis was performed by χ^2 . We found no evidence of an association between SNAP-25/STX1A genes and alcoholism.

Although it will be important to extend the present study to a larger sample, our preliminary results do not suggest any association between SNAP-25 and STX1A genes and alcoholism in the Portuguese population.

Alcoholism, Genetics, Exocytotic Machinery