Examining CETP gene associated with AD-related diseases of the Hispanic population in the Rio Grande Valley.

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Examining CETP gene associated with AD-related diseases of the Hispanic population in the Rio Grande Valley.

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Background:
There are currently about 6 million people in the United States that suffer from Alzheimer's Disease (AD) and Alzheimer's Disease related dementia (ADRD). It is a progressive disease beginning with mild memory loss and possibly leading to loss of the ability to carry on a conversation and respond to the environment. Over time, these conditions can cause many different health issues that decrease the quality of life. In addition, Hispanic people are twice as likely to develop AD or AD related dementia than non-Hispanic White people. In our study, we are investigating a known gene, CETP, that directly corresponds with AD and dementia in the U.S Hispanic population.

Methodology:
A total of 200 Hispanic subjects were collected from the Rio Grande Valley (RGV, N = 200). Questionnaires from demographics, lifestyles, medical history and saliva samples were collected. We genotyped for the CETP gene based on one SNP, with statistical analysis being performed through Chi-squares tests, independent sample t-test, and multivariable logistic regression models using SPSS version.

Results:
Current findings have indicated that there was a higher index of Hispanics in the RGV with both the major and minor alleles (A;G). Preliminary findings also showed that there was a higher frequency of individuals with (A;A, risk allele) than any of the other genotypes. There was a weak correlation found with lung problems and AD/ADRD.

Conclusion:
The CETP gene has shown increased risks of AD related diseases in the RGV Hispanic population. However, further research is needed to confirm our current findings for this specific population.