

PW01-236 - IMPULSIVITY AND STARTLE HABITUATION AS VULNERABILITY MARKERS FOR ALCOHOLISM

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Background: Impulsivity has been considered as a risk factor for alcohol dependence. Recent research is focusing on paradigms of the startle response (SR), specifically prepulse inhibition (PPI) and startle habituation (SH), as vulnerability markers for alcoholism. It has been demonstrated impairments in the PPI and the SH in offspring of alcoholics. It has also been shown, using personality questionnaires, that faster habituation may be associated with tendency toward impulsivity and behavioral disinhibition. Our goal is to study the correlation between impulsivity laboratory measures and the SR paradigms, in order to see if they could share a common base as endophenotypes for alcoholism.

Method: The subjects were 40 abstinent alcoholic males, aged 18 to 65 years (mean age 44.73) and who had met DSM-IV criteria for Alcohol Dependence, being abstinent for more than a month at the moment they were tested. Participants underwent testing for PPI and habituation of the acoustic startle response. Impulsivity was assessed with three different laboratory measures: Continuous Performance Test (CPT), Stop-Signal Task and Differential Reinforcement for Low-Rate Responding (DRL6). Analyses were performed using SPSS v.10.0.

Results: We found a significant positive correlation between CPT-tasks and SH ($p < 0,01$), and Stop-Signal Task-tasks and SH ($p < 0,05$), but not with DRL6-tasks. No significant correlation was demonstrated between impulsivity measures and PPI.

Conclusions: Our findings suggest the existence of a common base between impulsivity and SH as vulnerability markers for alcohol dependence. Further studies are needed to assess if both could share a common genetic origin.