

PW01-235 - **IMPAIRMENTS ON THE STARTLE REFLEX AND THE PREPULSE INHIBITION IN ABSTINENT ALCOHOLIC MALES**

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**Objectives:** Startle reflex (SR) is a defensive response to sudden, intense stimuli. Prepulse inhibition (PPI) refers to the ability of innocuous sensory events to reduce SR. PPI has been described as an operational measure of sensorimotor gating that is reduced in several neuropsychiatric disorders, such as schizophrenia, but there is no extensive experience in addictions and alcoholism. The objective of this study was to examine the existence of impairments on SR and PPI in abstinent alcoholic males.

**Methods:** Subjects were 40 abstinent alcoholic males, aged 18 to 65 years (mean age 44.73), 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. Subjects were then compared with 35 equal controls.

**Results:** Magnitudes of the SR were lower in abstinent alcoholic males when compared with controls. This differences were significant ( $p < 0,05$ ) in trials with prepulse presented 30, 60 or 120 msec before the onset of startle stimulus. There was a significant less percentage of PPI when prepulse was presented 30 msec before the startle stimulus ( $p < 0,05$ ).

**Conclusions:** Abstinent alcoholic males exhibit a decrease in the startle response magnitude and in the PPI of the SR. These data suggest that sensory information processing mechanisms could be damaged in abstinent alcoholic patients. The fact that these findings are common to other psychiatric disorders, could indicate the existence of a common vulnerability marker, and could explain the important comorbidity between alcoholism and other mental illness.