P-124 - PRELIMINARY RESULTS ON THE EFFECTS OF NICOTINE WITHDRAWAL ON LABORATORY INDUCED PANIC

B.Amendola, N.Lazzarini, F.Cosci

Department of Psychology, University of Florence, Florence, Italy

Introduction: Cigarettes smoking may increase the likelihood to develop panic. A recent hypothesis suggests that a cognitive mechanism, triggered by nicotine withdrawal symptoms, would be the pathogenetic explanation of the co-occurrence between cigarette smoking and panic.

Objectives: The literature on alcohol use disorders shows that alcohol withdrawal favors the onset of panic via a biological mechanism called kindling. Thus, nicotine withdrawal might be the possible biological explanation of the co-occurrence between cigarette smoking and panic.

Aims: To study the biological effects of nicotine withdrawal on a panic like response induced by the Breath Holding test (BH).

Methods: We run a cross-over design study on current smokers. Each subject received both nicotine and placebo in two different test days according to a randomized, double blind order. Thereafter, they underwent the BH. The panic-like response to the challenge was evaluated measuring blood pressure, heart rate, subjective (Visual Analogue Anxiety Scale - VAAS) and objective anxiety (Panic Symptom List - PSL).

Results: 28 subjects (13 females and 15 males) with a mean age of 31.0 ± 10.2 years were studied. At baseline the two conditions did not differ. At pre-test, subjects under nicotine had significantly higher blood pressure and heart rate than under placebo. No statistically significant results were found for the effects of nicotine on the BH response and subjects under nicotine had a longer breath holding time than under placebo.

Conclusions: Nicotine withdrawal symptoms seem not to affect the response to the BH in current smokers.

1