

## NITRIC OXIDE METABOLITES PLASMA LEVEL IN ALCOHOL DEPENDENT MALE PATIENTS DURING SIX-MONTH ABSTINENCE

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**ABSTRACT – BACKGROUND:** It is suggested, that nitric oxide (NO) may be involved in pathomechanism of alcohol dependence and withdrawal symptoms. THE AIM of this study was to determine the NO metabolites level and its relation to demographic and clinical factors in alcohol dependent patients during six months long abstinence period. **PATIENTS AND METHODS:** We studied 47 alcohol dependent male patients who drank alcohol 14 days at the latest, and 20 non-alcoholic males, who haven't drank alcohol for the last month. In all patients twice, at the study start, and four weeks and six months long abstinence period the plasma NO metabolites level was determined. At the six month visit turned up 18 males, in who NO metabolites determination was made. **RESULTS:** During first four weeks of controlled abstinence alcoholics had lower NO metabolites plasma level than control group. In abstinent alcoholics (n=18) we observed the significant decrease of mean nitrites concentration between 4<sup>th</sup> week and 6<sup>th</sup> month of observation period. At each determination NO plasma level in multiple regression correlated significantly mainly with factors defining alcohol drinking and dependence to it. **CONCLUSION:** In alcohol dependent male patients during 6 months long abstinence period the NO metabolites level lower than in control group, what may suggest decrease in NO synthesis or accelerated consumption in this patients group. NO metabolites level in studied alcoholics was related to intensity of alcohol drinking and severity of dependence to it.

**Key words:** nitric oxide, alcohol dependence, alcohol drinking relapse.