

P-1274 - POSSIBLE PATHOPHYSIOLOGICAL ROLE OF THE RELATIONSHIP BETWEEN LEVELS OF NITRIC OXIDE AND BILIRUBIN IN PATIENTS WITH SCHIZOPHRENIA

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Introduction: Today we have a large number of articles that investigate oxidative stress and potential role of nitric oxide (NO) in the pathophysiology of schizophrenia and a lot of evidence of altered antioxidant capacity. Interesting scientifically facts is that bilirubin acts as an endogenous scavenger of NO, giving him the role of antioxidant that is reduced in schizophrenia.

Objectives: Antioxidant properties of bilirubin through its interaction with the nitric propose that bilirubin-nitric oxide as a new biomarker of oxidative / nitrosative stress.

Aims: The aim of our study was to investigate possible correlation between serum levels of nitric oxide and bilirubin in patient's whit schizophrenia.

Methods: The study was consisted of 50 patients with schizophrenia and 50 healthy controls. We investigated the levels of nitric oxide, which is determined by conversion of nitrate to nitrite and then measuring with Greiss reagent, but only in group patients we measured the mean levels of bilirubin, within of course of illness.

Results: Mean of NO between group patients and controls are statistically significant (CI= 13.31-27.29, $t= 5.863$, $p= 0.0001$). The average value of total bilirubin in patients suffering from schizophrenia was presented with SD = 11.77; 6.06 ± 0.86 , and is statistically significant differences between the flow of diseases with the level of bilirubin, where the highest values detected markedly with the first hospitalization.

Conclusion: Antioxidant capacity of schizophrenia decreases with the progress of the disease. We can deduce that imbalanced between NO and bilirubin participates in the pathogenesis basis of schizophrenia.