

## YPSP01-10 - BLOOD CHOLESTEROL AND SERUM CREATINE KINASE LEVELS IN VIOLENT PSYCHIATRIC PATIENTS

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**Objectives:** Individuals with severe mental illness display significantly higher rates of violence than general population. In previous reports, violent behavior was found associated with mean serum creatine kinase activity (MSCK) and with reduced levels of total blood cholesterol (LTBC). The aim of study was to assess an association between MSCK and LTBC in two groups of male violent forensic psychiatric offenders.

**Methods:** The study population was 256 offenders from the closed ward, of whom 214 were schizophrenia patients and 42 were patients with personality disorders. The prevalence of murderers was 21.7% in the schizophrenia group and 21.3% in the group with personality disorders.

**Results:** Schizophrenia patients had significantly higher MSCK and LDH levels than subjects with personality disorders. There were no significant between-groups differences on other biological parameters. No significant differences on these parameters were found between murderers and non-murderers in both groups. In the overall sample, significant negative correlation was found between MSCK activity and total cholesterol levels. Similar correlation pattern was found in the schizophrenia group, but not in subjects with personality disorders.

**Conclusions:** The results show for the first time identifiable MSCK/LTBC pattern in violent schizophrenia patients but not in subjects with personality disorders. It is possible that different character of association between MSCK and LTBC in two groups of violent forensic psychiatric offenders (schizophrenia patients vs. subjects with personality disorders) reflects different biological origins of violent behavior. Further investigation of described MSCK/LTBC pattern in larger population of forensic and non-forensic, psychiatric and non-psychiatric subjects, is warranted.