

P03-83

CORRELATION BETWEEN LIPID PROFILE AND DIFFERENT TYPES OF AGGRESSIVE BEHAVIOUR IN COMBATANTS

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Objectives: At present there is a discussion whether cholesterol level, aggression and violence are connected for they are characteristic behavioral patterns in combatants suffering particularly from PTSD.

Method: With the help of the Aggressive Behaviour Assessment Scale we examined 337 combatants and 116 healthy people, also we held an additional investigation of serum concentration of lipid profile. Reliability of results was evaluated by the Mann-Whitney U-test. Also the correlation analysis (Spearman rank correlation coefficient) was carried out.

Results: Combatants showed an integrated overall index of aggression twice as much in comparison with the control group ($2,44 \pm 0,09$ and $1,08 \pm 0,08$, $\text{Đ} < 0,00001$), impulsive aggression was five times greater ($2,08 \pm 0,12$ and $0,39 \pm 0,06$, $\text{Đ} < 0,00001$), premeditated aggression was 1,7-fold ($3,15 \pm 0,11$ and $1,78 \pm 0,13$, $\text{Đ} < 0,00001$). The highest points of emotional (impulsive, hostile) aggressive behaviour revealed negative links with concentrations of cholesterol ($r = -0,109$, $\text{Đ} < 0,05$), LDL total cholesterol ($r = -0,109$, $\text{Đ} < 0,05$), triglycerides ($-0,137 \geq r \geq -0,108$, $\text{Đ} < 0,05$). Certain positions of premeditated (instrumental) aggression positively correlated with level of total cholesterol ($0,140 \geq r \geq 0,126$, $\text{Đ} < 0,01$), LDL total cholesterol ($0,141 \geq r \geq 0,161$, $\text{Đ} < 0,01$).

Conclusions: Reduction of cholesterol level and its most atherogenic fractions increases intensity of impulsive aggression and diminishes instrumental aggression of aggressive behaviour whereas increase of lipid profile leads to opposite results. The obtained data can be of great importance for treatment and prophylaxis of cardio-vascular disorders which are so typical for combat veterans.