March 2000 (Volume 41, Number 1)

Platelet Monoamine Oxidase Activity, Ego Strength, and Neuroticism in Soldiers with Combat-Related Current Posttraumatic Stress Disorder

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Aim. To assess possible differences in platelet monoamino oxidase-B (MAO-B) activity, ego strength, and neuroticism in combat-experienced soldiers with or without current posttraumatic stress disorder (PTSD).

Method. The soldiers with current PTSD (N=36) and a control group of 34 healthy soldiers were matched in combat experience, time passed between combat experience and the study, demographic variables (age, marital status, education), and smoking status. Platelet MAO-B was assayed fluorometrically, ego strength was measured by the Croatian version of the Ego Identity Scale, and neuroticism by the N-scale from Eysenck's EPQ-R questionnaire.

Results. Soldiers with combat-related current PTSD had lower platelet MAO-B activity than the control group (9.1±3.9 vs. 11.9±4.0; p<0.05), as well as lower ego-strength (86.3±8.3 vs. 108.6±13.4; p<0.05) and higher neuroticism (23.5±13.2 vs. 5.9±4.7; p<0.05). There was no association of ego strength or neuroticism with platelet MAO-B activity.

Conclusion. Ego identity strength and emotional stability are associated with successful coping with combat trauma. The involvement of platelet MAO-B activity in biological basis of ego strength and neuroticism could not be demonstrated.

Key words: Croatia; ego; monoamine oxidase; neurotic disorders; personality tests; psychotrauma; PTSD; veterans; war

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