P1 Environmental psychiatry

NEUROPSYCHOLOGICAL CHANGES IN WAR-RELATED PTSD

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Objective and Method: There are no reliable neuropsychological markers for PTSD and the objective of this examination was to ascertain changes of event-related potential in chronic PTSD. It was considered that there may be persistent dysfunction of the neurochemical organization of cerebral structures influencing the character of bioelectrical activities of the brain as a result of chronic stress. Using patients showing clinical manifestations of PTSD and experience of war of more than 2 years, event-related potentials were ascertained with the Modelec Mystro MS20 device and audio stimulii. Participants were asked to count reactive signals, first silently and then aloud. The recording provided exogenous and endogenous data. The first is compound consisting of N2-P3-SW complex.

Results: 11 patients have been examined so far and only endogenous evoked potentials were analysed. 36.3% of patients showed elongated latency of N-200 waves, and 45.4% showed decreased amplitude of P-300 waves. Conclusions: 1. The registered changes of N-200 component (elongated latency) have shown an extraordinary dysfunction of medio-based parts of temporal lobuses (hypocampus and nucleus amigdale); 2. Expected aberrations of P-300 waves latency could be explained by a compensatory activity of the second cortical generator of P-300 waves in temporoparietal associative area.

P2 Environmental psychiatry

EPILEPSY AMONG CHILDREN FOLLOWING CHRONIC RADIATION

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This investigation is part of the State programme. 219 children between the ages of 6 and 8 were studied in the heavy radiation zone of Ural. A control group was used with the same age group from a clean area with a similar demographic data. The mental pathology of the main group was represented by border-line disorders. The clinical picture of 14.1% of the patients was marked by paroxyms as a result of cerebral astheny. Episodes of headache, somnambulism, sleeptalking, night fears, enuresis, ticks, stuttering, periods of anger, negativism and aggression were observed. EEG showed the manifestation of disrhythm, irritation, and hypersynchronization, sharp and slow waves and their complexes, picks and polipicks. Spreading microsymptoms were also discovered. Anticonvulsive drugs were effective treatment and the results showed that "border-line epilepsy" was considered an appropriate term.