

Some electrophysiologic signs of impairment of verbal prediction in schizophrenia (Russian)

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Abstract

In a study of speech prediction in schizophrenic patients the authors registered the EEG with the use of a computer, and the coefficients of signal correlation. It was established that after the perception of the second word in 3 member phrases with an easily predictable ending, in normal subjects there was a significant increase in the number of synchronously oscillating cortical points, particularly in the frontal area. In schizophrenic patients it was possible to observe a reverse, more diffuse cortical activation, involving the lower sincipital areas. The amplitude of the skin galvanic reaction in normal subjects progressively declined during the perception of phrases which could be anticipated and increased markedly upon the perception of the expected word. This was not observed in schizophrenia. It may be inferred that in schizophrenia it is not so much the mechanism of speech preception and prediction that is disturbed but rather the mechanism of regulating these processes which are controlled by the frontal areas of the brain.
