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**QUANTITATIVE EEG CRITERIA OF REMISSION IN EPILEPSY AND COMORBID PSYCHIATRIC DISORDERS**

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Remission in epilepsy considered accessed when convulsions ceased, EEG pattern is normalizing and there are no mental disorders. The problem is that there is no any assurance that remission is stable or epilepsy may relapse unexpectedly.

The aim of the investigation was to find new diagnostically efficient criteria of remission/acute condition of epilepsy and comorbid psychiatric disorders by Quantitative EEG (QEEG).

Objectives: 164 patients with epilepsy and comorbid psychiatric disorders, aged 18-55 years observed recurrently during a period of 5-9 years. Cognitive disorders were diagnosed in 28% of patients, psychoses – 0.7%, depressive disorders – 3%, personality disorders – 68%. Etiologically epilepsy was symptomatic, associated with brain damage (n=91) and neuroinfections (n=73). Remission for  $\geq 2$  year period was set in 62% cases.

Methods: The survey conducted on EEG 'Mizar' 16 channels. We investigated the alpha-rhythm mean and peak frequency (normal value  $\geq 9.15$  Hz both), index of slow-wave activity (<29%), spatial organization of beta- and alpha-activity. Scientifically proved that appearance of anyone abovementioned QEEG characteristic means actuality of brain damage and the reduction is a sign of brain state rehabilitation.

Results: QEEG revealed patterns of organic brain damage in 88% of cases. When remission achieved QEEG patterns exposition decreased from 88% to 9%.

Conclusion: The data obtained fits the hypothesis that activity of epilepsy and comorbid psychiatric disorders defined by mean of Quantitative EEG. These characteristics of the brain's functional state very sensible. Neurologists and psychiatrists have possibility to take into account this information while prescribing or depriving anticonvulsants.