Article: 894
Topic: 66 - Psychosurgery & Stimulation Methods (ECT, TMS, VNS, DBS)

CAN RTMS BE AN ALTERNATIVE OF PSYCHOPHARMACOLOGY IN EPILEPSY?

V. Kistsen*, V. Evstigneev*

Belarusian Medical Academy of Postgraduate Education, Minsk, Belarus

The aim of our study was optimization of hippocampal activity in epilepsy patients by rTMS with modality which was detected in different seizures models and calculated in mathematic model to determinate of parameters for hippocampal targeted stimulation.

Methods: Sixty eight patients with epilepsy (mean age 28.1±2.9 years) were studied (DTI MRI, EEG-mapping, neuropsychological tests). Patients of control group (n=32) took AED at therapeutic doses and had side effects at 97%. Patients of experimental group (n=36) treated with low AED doses and 1 Hz rTMS over the temporal lobe with focusing on hippocamp projection.

Results: There were depression at 48.5% and high anxiety level at 40% of examined patients what correlated with position of epileptic focus in left hemisphere (OR=6.7, p=0.045), presenting of “spike-slow wave” complexes (OR=9.6, p=0.0001), female gender (OR=4.2, p=0.04) and focal onset of seizure (OR=2.1, p=0.039). Dynamic monitoring at control group did not reveal any differences at epilepsy course during 12 monthes.

At experimental group significant decreasing of seizure frequency and severity during 12 weeks after rTMS onset was determined. Antidepressive and anxiety effect was obtained at 46% patients to tenth procedure (p=0.004). Increasing of quality of life was registered by QOLIE-31 (p< 0.05). Received effect remained during six monthes in 40% experimental patients (p< 0.05).

Conclusions: Thereby, including of rTMS into combined epilepsy therapy with low doses of anticonvulsants has a determining function and leads to significant antiepileptic effect improves the psychological condition, quality of life of these patients and allows avoiding of psychotropic drugs prescription.

https://doi.org/10.1016/S0924-9338(13)76059-0 Published online by Cambridge University Press