Sleep disturbance and epilepsy in developmental disorders

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Objectives: In pharmacotherapy for developmental disorders, not only anti-psychotic drugs, but a combination of anti-epileptic drugs are effective for sleep disturbance. Evidence of sleep disturbance in developmental disorders associated with abnormal EEG has not been established. We evaluated the EEG abnormalities and usefulness of anti-epileptic drugs for sleep disturbance in developmental disorders.

Methods: A total of 202 children (146 males, 46 females, mean 12.7 years) were included in this study. EEG had been recorded every 6 months under sleep conditions. We examined the therapeutic effect of behavioral and psychiatric improvement and sleep disturbance.

Results: EEG abnormalities were present in 76.7%, sleep disturbance was complicated in 33.3% of whole; 41.4% in autism spectrum disorders and 16.4% in attention deficit hyperactivity disorders respectively. Epilepsy was present in 53.3%. Almost patients showed EEG abnormalities on frontal areas. Although, there is no statistical difference in the effectiveness of anti-psychotic drugs or anti-epileptic drugs, in the both combined patients were more improved.

Conclusions: Anti-epileptic drug is effective for sleep disturbance in developmental disorders who showed EEG abnormalities. In cases of EEG abnormalities, anti-epileptic drugs may be an alternative treatment for sleep disturbance in developmental disorders.

Biography
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1996-1999 Neurology: Department of Neurology, University of British Columbia (Canada)
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