The Influence of Biperiden on the Cognitive Functioning in Schizophrenia Patients

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Abstract : In recent years atypical antipsychotics have been developed, and pharmacotherapy has made great progress, but many antiparkinsonian drugs, biperiden is prescribed for extrapyramidal symptoms. However, biperiden has been reported to influence the cognitive functioning. We therefore examined and analyzed the cognitive functioning in regard to the social rehabilitation of schizophrenia patients neuropsychology and neurophysiology. Method: The subjects included 8 schizophrenia patients who had received risperidone for more than two months. We prescribed biperiden 4 mg/day to the subjects for 2 weeks and we evaluated the Positive and Negative Symptoms Scale (PANSS), Global Assessment of Functioning (GAF), evaluation standard of extrapyramidal symptoms neurology (Simpson&Angus), Trail Making Test (TMT), Wisconsin Card Sorting Test (WCST) and Prepulse Inhibition (PPI) after taking biperiden for 2 weeks. Results : Regarding PANSS, and GAF, no significant change was observed, but a significant improvement was seen for Simpson&Angus. TMT did not show any change in significance, but the WCST tended to show an improvement in the number of categories achieved. The PPI tended to increase when the interval between the prepulse and pulse was 120msec. Conclusions : This study showed that biperiden did not have any influence on the psychic symptoms regarding the rehabilitation of schizophrenia patients, but it did improve the extrapyramidal symptoms, and our findings showed that biperiden did not influence the cognitive functioning in such patients.

Key words : Schizophrenia, Cognitive functioning, Trail making test, Wisconsin card sorting test, Prepulse inhibition