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PREDICTION OF RESPONSE TO BUPROPION TREATMENT - THE EARLY CHANGE OF PREFRONTAL QEEG CORDANCE. OPEN LABEL STUDY

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Aims: Previous studies demonstrated predictive effect of reduction of prefrontal cordance for non-resistant outpatients or resistant inpatients treated by various antidepressants or venlafaxine. The aim of the present study was to examine whether the reduction of theta prefrontal QEEG cordance value after 1 week of bupropion administration is associated with response to 4 weeks treatment in patients with resistant depressive disorder. We extended our previous pilot data.

Methods: We analyzed 18 inpatients, who finished 4-week treatment with venlafaxine. EEG data were monitored at baseline and after 1 week of treatment. QEEG cordance was computed at 3 frontal electrodes in theta frequency band. Depressive symptoms were assessed using Montgomery-Åsberg Depression Rating Scale (MADRS).

Results: Nine of 11 responders (reduction of MADRS $\geq 50\%$) and no one of 7 non-responders decreased prefrontal QEEG cordance value after the first week of treatment. Positive and negative predictive value (PPV, NPV) of cordance reduction for response to treatment was 1.0 (95% CI, 0.8-1.0) and 0.78 (95% CI, 0.57-0.78), respectively.

Conclusions: Based on our results, the prefrontal QEEG cordance might be helpful in the prediction of the response to bupropion treatment in resistant patients.

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