P02-100

QEEG CORDANCE IN THE PREDICTION OF RESPONSE TO KETAMINE IN DEPRESSIVE PATIENTS - INTERIM ANALYSIS OF RANDOMIZED CONTROLLED TRIAL

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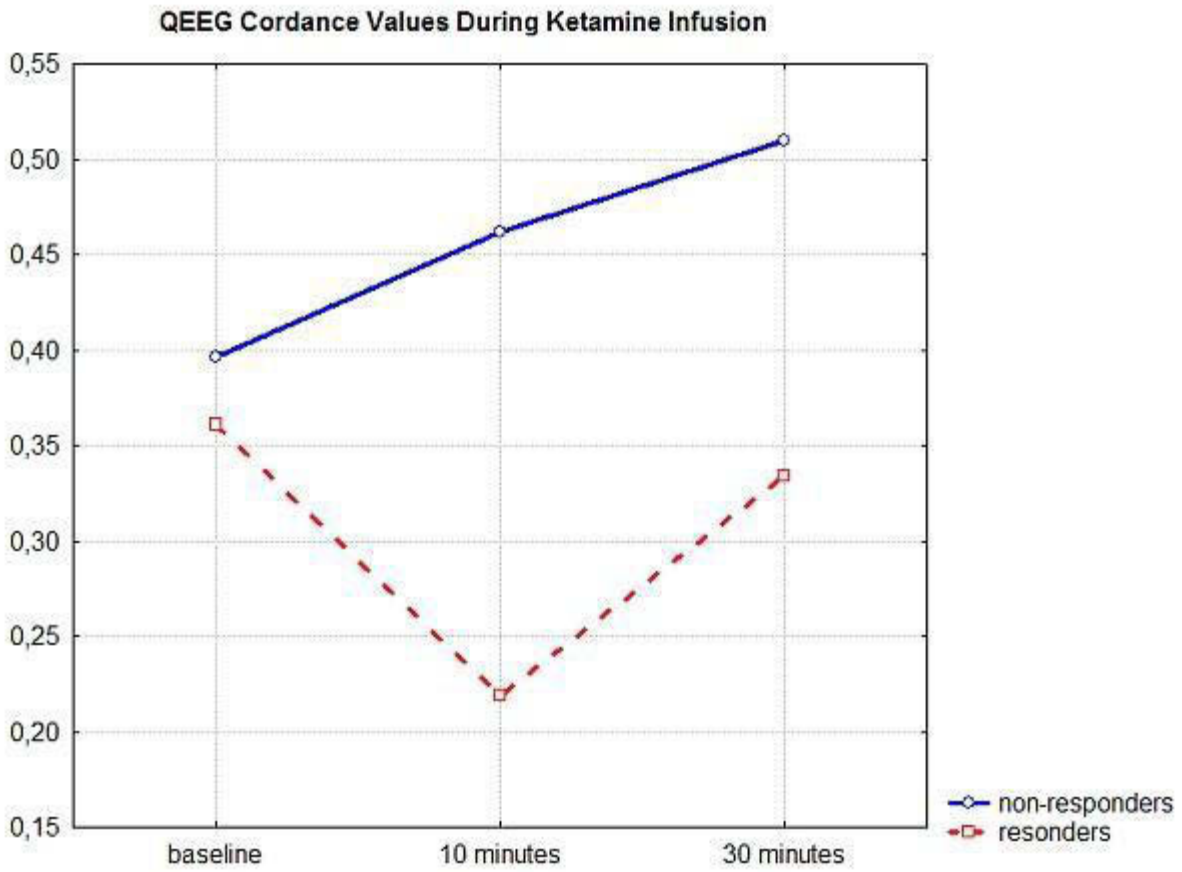
Objective: Rapid and robust antidepressant-like effect of ketamine in subanesthetic doses was already manifested in depressive patients. Maximum of mood improvement was shown within the period from 2 hours to 3 days . Previous studies proved predictive value of prefrontal QEEG theta cordance reduction after 1 week on a new antidepressant. Congruently with previous findings we hypothesised in our compressed model decrease of QEEG cordance in 10 minutes of ketamine hydrochloride infusion as the prediction of antidepressant response.

Methods: 14 MDD patients (6F/8M) diagnosed with a moderate to severe depressive episode without psychotic symptoms were included. All of the participants received the 30 minutes lasting only infusion with subanesthetic dose of ketamine hydrochloride solution (0.54mg/kg). EEG measurements on the baseline, after 10 and 30 minutes of infusion were taken into account in computation of QEEG cordance.

Results: 9 (64.3%) of subjects responded to single ketamine infusion following day and 8 (88.9%) of them decreased QEEG cordance. T-test pair comparison found significant difference between baseline and after 10 minutes of ketamine infusion in responders ($F=4.12$; $p< 0.003$).



[QEEG Cordance Values During Ketamine Infusion]

Conclusions: Preliminary results have shown the tendency of prefrontal QEEG cordance to

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decrease as a ketamine response prediction. Larger sample size is needed to increased precision in estimates of cordance sensitivity and specificity. Combination of latest QEEG method and fastest-acting antidepressant-like effect of ketamine in this trail is unexampled.
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Local Ethics Committee approval has been granted.

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