

IMPACT ON CORTISOL AND ANTIDEPRESSANT EFFICACY OF QUETIAPINE AND ESCITALOPRAM IN DEPRESSION

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Background: In this study, the impact of quetiapine fumarate extended release (QXR) and escitalopram (ESC) on HPA axis activity was investigated in depressed patients in relationship to antidepressant efficacy.

Methods: In a randomized, open-label 5-week trial 60 inpatients suffering from major depression (DSM-IV criteria) were treated for 5 weeks with either QXR (300 mg/day) or ESC (10 mg/day). The dexamethasone/CRH (DEX/CRH) test was performed before treatment, after 1, and after 5 weeks of treatment. Cortisol (COR) AUC values were used to assess HPA axis function. The Hamilton Depression Rating Scale was used weekly to estimate antidepressant efficacy.

Results: QXR and ESC showed comparable antidepressant effects but strongly differed in their impact on HPA axis activity. In the QXR group, a marked inhibition of COR AUC levels was observed which was most pronounced after one week of treatment but showed a partial re-increase after 5 weeks of treatment. In contrast, ESC transiently stimulated COR AUC values (week 1) whereas COR AUC levels at week 0 and week 5 were comparable. COR improvement at week 1 (defined as COR peak value reduction between DEX/CRH test 1 and 2) was significantly associated with better clinical outcome.

Conclusion: Apparently, different effects on HPA axis activity reflect distinct pharmacoenocrinological properties of psychotropic drugs.

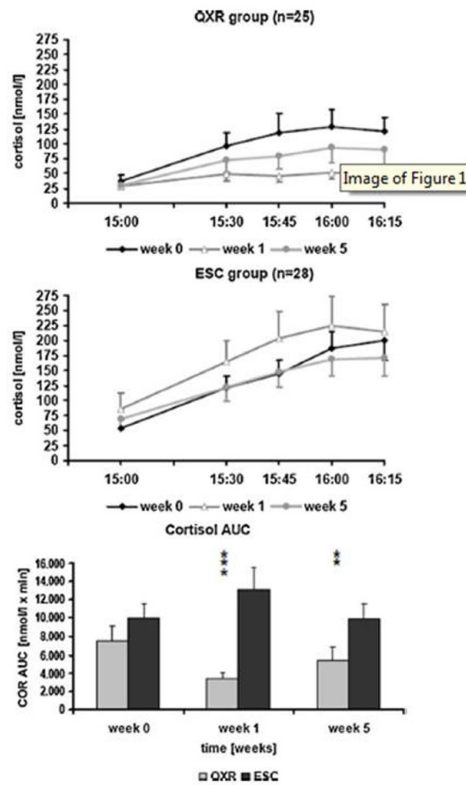


Figure 1 Mean COR concentrations during 3 DEX/CRH tests (week 0, 1, 5) in depressed patients treated with QXR (300 mg/day) or ESC (10 mg/day). SEM (standard error of mean) indicated. *:p < 0.05. **:p < 0.01.

(clinicaltrials.gov Identifier: NCT00953108).

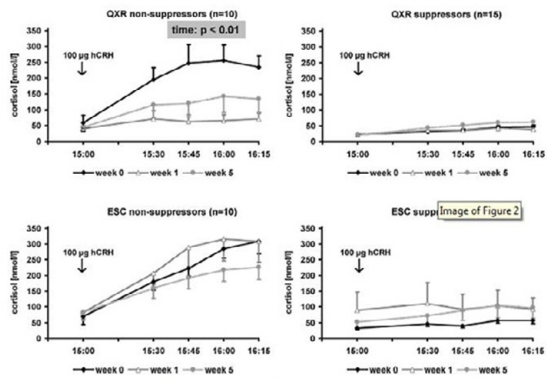


Figure 2 Mean COR concentrations during 3 DEX/CRH tests (week 0, 1, 5) in depressed patients treated with QXR (300 mg/day) or ESC (10 mg/day) subdivided into non-suppressors and suppressors. SEM (standard error of mean) indicated.

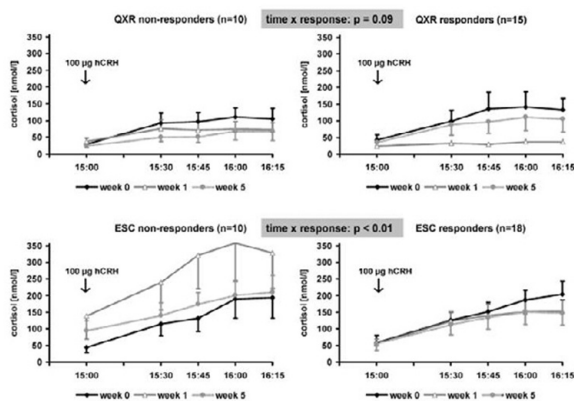


Figure 3 Mean COR concentrations during 3 DEX/CRH tests (week 0, 1, 5) in depressed patients treated with QXR (300 mg/day) or ESC (10 mg/day) subdivided into non-responders and responders. SEM (standard error of mean) indicated.