P02-213 - **QTC INTERVAL CHANGES DURING ECT-ZIPRASIDONE-QUETIAPINE-TRICYCLICS CO-ADMINISTRATION: SAFETY ISSUES**

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Objectives: Both tricyclic antidepressants and some atypical antipsychotics, such as ziprasidone and quetiapine, used as augmentation agents in severe major depression, are known to increase QTc interval to a moderate extent (10-20 msec). Moreover, electroconvulsive therapy (ECT) also increases patients' propensity to arrhythmias. Finally, females are more prone than males to both drug-induced QTc prolongation and torsades-de-pointes. Thus, the combination of all the above treatments raises serious safety concerns. We investigated the safety of the co-administration of ECT with a tricyclic-ziprasidone-quetiapine combination with respect to QTc interval in six female patients with severe major depression resistant to pharmacotherapy.

Methods: Each patient underwent a series of 10-11 sessions of bilateral ECT. QTc intervals were calculated at baseline and several times up to 10 min after seizures cessation in a total of 63 patients/ECT sessions.

Results: A small initial decrease of QTc after the administration of pre-ECT medications was followed by its steady statistically non-significant increase during the first 20 sec after seizure cessation. Thereafter, a steady larger and statistically significant decrease of QTc emerged during the ensuing 21-50 sec interval. Finally, this decrease was gradually reversed within the following 2 min approximately with return of QTc interval to stable baseline levels.

Conclusions: Overall, QTc interval changes remained within normal limits (fixed at 470 msec in women), without the occurrence of any cardiac adverse events, especially severe arrhythmias such as torsades-de-pointes. Our findings suggest that the co-administration of these treatments might be safe, at least with respect to QTc interval changes.

https://doi.org/10.1016/S0924-9338(10)71068-3 Published online by Cambridge University Press