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Commentary Open Access

Attention for Possible Cardiovascular Adverse Effects Under ECT in Association with a Combined Medication of Lithium and Duloxetine

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Commentary

Electroconvulsive therapy (ECT), which is one of the most effective treatments in psychiatry -especially for treatment resistant depression and febrile catatonia-requires a good interdisciplinary cooperation of psychiatrists and anaesthesiologists. This relates also to the use of medication and the combination of drugs from both fields like antidepressants and lithium on the one hand and anaesthetics and muscle relaxants on the other hand as well as their potential side effects in the performance of ECT. The brief clinical report published in the Journal of ECT [1] addresses the dilemma of continuing lithium prophylaxis and antidepressant therapy in view of possible cardiovascular adverse effects under ECT [2,3] in patients with a depressive disorder. It was reported of a depressed 48-year old woman treated with a combination of lithium and doluxetine who developed a ventricular tachycardia during ECT. A possible interaction with succinylcholine was considered and rocuronium was used as an alternative muscle relaxant. After reduction of lithium and withdrawal

from duloxetine-as both drugs are reported to be possibly associated with cardiac arrhythmias [4,5]-ECT was continued without further adverse effects. One conclusion is that attentive evaluation of every patient and the medication is needed if ECT is performed. Another conclusion is that further observation and systemic studies on cardiac side-effects of SNRIs and SNRI-lithium combinations during ECT are needed.

References

- Boeker H, Perniola L, Risch M, Himmighoffen H, Roemer B, et al. (2013) Postictal Ventricular Tachycardia after ECT-Treatment Associated with a Lithium-Duloxetine Combination. J ECT 29: e33-e35.
- 2. Dulinski SY, Zwara TA (1997) Anaesthetic considerations of cardiovascular risk during electroconvulsive therapy. Convuls Ther 13: 157-164.
- Sartorius A, Hever D (2007) Safe performance of ECT in severely ill patients: a retrospective study. Eur J Psychiatr 21: 237-247.
- Freeman MP, Freeman SA (2006) Lithium: clinical considerations in internal medicine. Am J Med 119: 478-481.
- Stevens DL (2008) Duloxetine-associated tachycardia. The Annals of Pharmacotherapy 42: 1511-1513.