

P-1173 - THE INFLUENCE OF 10-WEEK TREATMENT WITH PSYCHOTHERAPY ON HEART RATE VARIABILITY (HRV)

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Introduction: Heart rate variability (HRV) reflects the oscillations of successive heartbeats (variability of R-R periods). It is considered to be decreased in various psychiatric conditions, for example in depression (1). We ask if a treatment with psychotherapy can have a positive effect on HRV.

Aim: To assess whether a 10-week systematic dynamic group psychotherapy treatment influences HRV. There were the following parameters of HRV assessed: high frequency (HF), low frequency (LF), total power (TP), mean square successive differences (RMSSD), stress index (SI).

Methods: The measurement of HRV was carried out under standard conditions. We have recorded ECG with the use of TESLAGRAPH® device.

Sample characteristics: 10 women and 5 men attending a 10-week treatment. The psychiatric diagnoses were various anxiety and neurotic disorders.

Results: (median: before treatment - after a 10 week treatment): HF (442 Hz - 305 Hz ; p= NS); LF (709 Hz - 556 Hz ; p= NS); TP (1835 ms² - 2371 ms²; p= 0,NS); RMSSD (28 ms² - 33 ms²; p= 0,NS); SI (106 - 66; p= NS).

Conclusion: An improvement was found in all characteristics of HRV after the treatment, however the differences are not statistically significant.

(1) Licht CM, de Geus EJ, et al. Association between major depressive disorder and heart rate variability in the Netherlands Study of Depression and Anxiety (NESDA). Arch Gen Psychiatry. 2008;65(12):1358-67.