Dokumenttyp: journal article

Autor(en) des Beitrags: Birkhofer, A; Geissendoerfer, J; Alger, P; Mueller, A; Rentrop, M; Strubel, T; Leucht, S; Förstl, H; Bär, KJ; Schmidt, G


Abstract: BACKGROUND: Schizophrenia is associated with increased cardiac mortality. A disturbed autonomic modulation of heart rate (HR) has been described in patients with schizophrenia in whom antipsychotic medication may represent an additional cardiac risk. The novel measure deceleration capacity (DC) of heart rate predicts cardiac mortality in patients with cardiovascular illnesses. The aim of the present paper was to calculate DC in patients with schizophrenia and to compare this measure with established parameters of heart rate variability (HRV).

METHODS: HRV and DC were calculated in 24-hour electrocardiogram (ECG) recordings of 20 unmedicated, 40 medicated patients with schizophrenia and 40 controls. As activity has a major influence on HRV, 4-hour periods of "sleep-" and "wake-" ECG were evaluated as additional parameters. Actigraphy was used to ensure comparable levels of activity in patients and controls. RESULTS: The DC as well as the other established HRV measures were not significantly different comparing unmedicated patients with schizophrenia to healthy controls. However, medicated patients showed a significant reduction of DC calculated from ECG recordings during 4-hour over night periods.

CONCLUSION: Calculation of DC...
might contribute to a better monitoring and identification of an increased risk of cardiac mortality in patients with schizophrenia undergoing antipsychotic treatment.