HEART RATE DECELERATION: MARKER FOR SUICIDE RISK IN MAJOR DEPRESSIVE DISORDER?

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Previous studies examining potential suicide risk predictors in Major Depressive Disorder (MDD) patients showed psychophysiologic differences between patients with and without severe suicide attempt in their lifetime history: Electrodermal Activity (EDA) and Event-Related Potential (ERP) P3 as Markers for the Orienting Response (OR) showed a faster course of habituation to repeated acoustic stimuli in patients with suicide attempt than in those without. The deceleration of the heart rate following to a stimulus is regarded as a further indicator for the OR. In the current study, we examined whether an altered course of habituation between MDD patients with (SA) or without (NSA) a history of suicide attempt is also found in the deceleration of the heart. ORs were elicited by 24 simple acoustic stimuli presented in intermittent interstimulus intervals as indicated by heart rate deceleration. The difference between the deceleration of the first and the last 12 stimuli was calculated in order to detect the strength of habituation. The results are showing a stronger habituation in the SA than in the NSA group. This suggests that heart rate deceleration is besides EDA and P300 a further possible psychophysiologic indicator for the assessment of suicide risk in clinical practice.