

Poster presentation

## Neurobiological and psychological correlates of suicidal attempts and thoughts of death in patients with major depression

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### Background

Suicide is a major problem for psychiatry. Depression is the most common mental disorder related with suicidal behavior. The present study aimed to investigate the relationship of the symptomatology related to death, dying and suicide, with neurobiological factors in depressed patients.

### Material and Methods

Fifty patients aged 21–60 years suffering from Major Depression. The SCAN v 2.0 and the IPDE were used to assist clinical diagnosis. The psychometric assessment included the Hamilton Depression Rating Scale (HDRS), the Hamilton Anxiety Scale (HAS), the 1965 and 1971 Newcastle Depression Diagnostic Scales, the Diagnostic Melancholia Scale (DMS), the General Assessment of Functioning Scale (GAF) and the Personality Deviance Scale (PDS). Psychophysiological Methods included Electro-oculogram (EOG), Flash-electro-retinogram (f-ERG) in photopic and scotopic conditions, and Pattern-Reversal Visual Evoked Potentials (PR-VEPs). Biological Markers included the 1 mg DST, the 30 mg Dexfenfluramine Challenge Test and brain <sup>99m</sup>Tc-HMPAO SPECT. The statistical analysis included 1, 2 and 3-way MANOVA and MANCOVA and the Scheffe test as post hoc test.

### Results

Patients without thoughts of death had higher self confidence, and less overdependency on others and intropunitiveness. Suicidal patients had significantly prolonged PR-VEPs latency in comparison to the rest of patients.

### Discussion

The findings of the current study were related to the status of the patient at interview but not to his/her history. They also provide neurobiological data to support the need for a combined presence of self-directed aggression and higher arousal level or disinhibition of self-directed aggressive thoughts in order for a patient to become suicidal. Further study is needed to test whether psychophysiological methods, which are non-invasive and easy to perform, are of value in the therapeutic planning and monitoring of response.