



## **Objective Quantification of Psychomotor Disturbances in Patients with Depressive Episode**

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### **Abstract:**

**Background:** Psychomotor disturbances have been regarded as cardinal symptoms of depression for centuries and their objective assessment may have predictive value with respect to the severity of clinical depression, treatment outcome and prognosis of the depressive disorder. In clinical practice psychomotor disturbances are evaluated and measured subjectively – by clinical observation and/or by rating scales.

**Aims:** To introduce a novel objective approach for recording and measuring psychomotor activity and reactivity in patients with clinical depression.

**Method:** Psychomotor indicators of activity and reactivity were objectively recorded and measured by computerized ultrasonographic cranio-corpo-graphy.

**Results and discussion:** Objective and quantitative assessment of psychomotor symptoms may have pathophysiological significance as psychomotor disturbances go along with affective dysregulation. It is supposed that common neurotransmitter pathology in the brain structures causes simultaneously psychomotor and affective dysregulation that underlies the pathophysiology of depressive disorder. Also, psychomotor retardation is thought to be a cardinal depressive symptom in endogenous depressions – unipolar and bipolar. On the other hand, psychomotor agitation may be considered as latent bipolarity, although the presence of manic symptoms within a depressive state and the role of psychomotor agitation in depressive patients are still disputable.

**Conclusion:** Integration between different methods is needed in order to improve the understanding of psychopathology and neurobiology of a disputable diagnosis such as clinical depression. We introduce in the field of psychiatry an objective and quantitative approach, which could permit psychomotor discrimination not only between depressive patients and healthy controls, but also between subgroups of depressive patients.

### **Keywords:**

Depression, Psychomotor Disturbances, Psychomotor Activity, Psychomotor Reactivity, Cranio-corpo-graphy