

## **P-1264 - ASSESSMENT OF THE DYNAMICS PARAMETERS OF THE DOMINANT HAND MOVEMENT IN PATIENTS WITH SCHIZOPHRENIA**

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**Objective:** The aim of study is to assess the graphomotor and psychomotor skills and eye-hand coordination in patients with schizophrenia

**Methods:** 30 patients were examined. The most accurate mapping of geometric shapes printed on the sheet, by drawing on dominant hand contour was the task for patients. The original test implemented on tablet was used. Designed software allowed an analysis of the motion's parameters: force levels, the time of the task, speed and acceleration of the plot, the amplitude and frequency of hand tremors. Results were compared with healthy group.

**Results:** Slight tremors reduced mean amplitude of the primary component (1Hz), while slightly increasing the mean amplitude for the components 2, 3 and 8 in the task of drawing the figures for the spectrum of trembling deviation was observed. In the signature task observed a significant reduction in the mean amplitude of tremors in the middle of the component analysis (5Hz to 9Hz). Significant changes in the range: 2Hz to 5Hz and 7Hz to 16Hz in the task of drawing the figures for the spectrum force levels were observed.

**Conclusion:** Comparison of the dynamics of motion in patients with schizophrenia to healthy subjects in the control group indicate a significant impairment of graphomotor and psychomotor efficiency. Particularly, the most differentiate these two groups refers to parameters quantitatively measured the level of tremors the dominant hand tremors, mostly in the fundamental frequency.