YSFC01-06 - **PERSPECTIVES OF USING NEUROIMAGING METHODS IN DIFFERENTIAL DIAGNOSIS OF DEPRESSION**

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Introduction: Depression is one of the most common mental health problem and it grows greater every year around the world.

Aims: The main aims were to analyze the possibility of using functional and structural neuroimaging methods in diagnosis of different depression types and to find the predictors of pharmacological resistance.

Materials & methods: 46 patients with depression syndrome were distributed into 3 groups: 1) Neurotic Depression (Diagnosis: Adjustment disorders) - ND group; 2) Endogenous Depression (Diagnosis: Recurrent Depression, Bipolar Affective Disorder - current depressive episode, Schizoaffective disorder, depressive type) - PD group, 3) Depression due to organic pathology (Diagnosis: Organic depressive disorder, Organic mixed affective disorder) - OD group. Controls were 18 years old- and gender-matched healthy participants. We used several methods of functional (positron-emission tomography, functional magnetic resonance imaging) and structural (voxel-based morphometry, diffusion-tensor imaging) neuroimaging.

Results: We found several functional and structural abnormalities in limbic structures within all three groups. Some of them were the same, some were different. Also we found several functional and structural predictors of pharmacological resistance.

Conclusions: We found several functional and structural abnormalities in all three depressive groups. Almost all of them were parts of so-called frontal-subcortical circuits, dysfunction of which, according to the present knowledge, could play crucial role in depression pathogenesis.

Summarizing our own results and analyzing the data of our colleagues, we complement a theory of depression pathogenesis and propose an original point of view for neurobiological basis of different types of depressive disorders and its pharmacological resistance.

https://doi.org/10.1016/S0924-9338(10)70200-5 Published online by Cambridge University Press