Conclusions: This case illustrates the importance of a thorough organic evaluation, including neuroimaging, in the differential diagnosis of patients with atypical symptoms before making a psychiatric diagnosis and instituting treatment.

Keywords: Neuropsychiatric; Neuroimaging; meningioma

EPP0802

Functional connectivity between brain regions underlying executive control and language in schizophrenia patients with history of auditory verbal hallucination

Y. Panikratova[1], I. Lebedeva[1], A. Tomyshev[1*], V. Kaleda[2] and R. Vlasova[3]

[1]Laboratory Of neuroimaging And Multimodal Analysis, FSBSI Mental Health Research Center, Moscow, Russian Federation; [2]Department Of Endogenous Mental Disorders, FSBSI Mental Health Research Center, Moscow, Russian Federation and [3]Department Of Psychiatry, University of North Carolina, Chapel Hill, United States of America
*Corresponding author.

Introduction: Schizophrenia patients with auditory verbal hallucinations (AVH) demonstrate impaired functional connectivity (FC) between brain regions, involved in executive functions and language. However, as most studies compare patients to healthy controls, the specificity of these findings either for schizophrenia in general or for AVH is unclear.
Objectives: We aimed to compare whole-brain resting-state FC of main language brain regions between schizophrenia patients with and without history of AVH and healthy controls.
Methods: Schizophrenia male patients with (n=31; mean age 29,8±11,6) or without history of AVH (n=16; 29±12,4) and 39 healthy male controls (30±8,9) underwent resting-state fMRI on 3T Philips scanner. No between-group differences in age, illness duration, and severity of clinical symptoms except AVH were revealed. Regions of interest (ROIs) were taken from the independent fMRI study with conventional language localizer and included left inferior frontal gyrus (l_IFG) and superior temporal gyri (STG) bilaterally. Whole-brain FC of each ROI was compared between groups (ANCOVA; p<.005 voxelwise; p(FDR)<.017 clusterwise, corrected for number of ROIs) with post hoc tests.
Results: Decreased FC between each STG (left and right) and anterior cingulate cortex (ACC) was revealed in all patients, compared to healthy controls. Patients with history of AVH, compared to other groups, showed decreased FC between l_IFG and ACC.
Conclusions: Disrupted fronto-temporal FC is non-specific for AVH and characterizes all schizophrenia patients. Patients with history of AVH have impaired FC between the l_IFG, underlying language production, and ACC, involved in differentiation between language production and comprehension. The study was supported by RFBR grant 18-013-01214.

Keywords: auditory verbal hallucinations; resting-state fMRI; functional connectivity; schizophrénia

EPP0803

Classification of first-episode schizophrenia patients, individuals at ultra-high risk for psychosis, and healthy controls using structural mri, eeg, and machine learning

A. Tomyshev[1*], N. Lutsyak[2], M. Belyaev[3], V. Kaleda[4] and I. Lebedeva[1]

[1]Laboratory Of neuroimaging And Multimodal Analysis, FSBSI Mental Health Research Center, Moscow, Russian Federation; [2]Laboratory Of Data Analysis And Predictive Modeling, Institute for Information Transmission Problems of the Russian Academy of Sciences (Kharkevich Institute), Moscow, Russian Federation; [3]Center For Neurobiology And Brain Restoration, Skolkovo Institute of Science and Technology, Moscow, Russian Federation and [4]Department Of Endogenous Mental Disorders, FSBSI Mental Health Research Center, Moscow, Russian Federation
*Corresponding author.