Article: 0395
Topic: EPO06 - e-Poster Oral 06: Schizophrenia 2, Suicidology and Suicide prevention, Treatment Practice and Obsessive-Compulsive Disorder

Fronto-subcortical Functional Connectivity in Patients with Schizophrenia and Bipolar Disorders

A. Vandevelde[1], E. Leroux[1], N. Delcroix[1], S. Dollfus[1]

[1]Calvados, Cyceron, Caen, France

Introduction: The question of a continuum or a dichotomy between schizophrenia and bipolar disorders is not clearly elucidated.

Objectives: The objective of the present study was to identify specific functional connectivity (FC) patterns in schizophrenia and bipolar disorders.

Aims: Therefore, the aim was to explore FC within the language production network in response to a verbal fluency task in patients with schizophrenia, patients with bipolar disorders and healthy participants. We hypothesized that prefronto-subcortical FC patterns within the language production network differ between the three groups.

Methods: Forty nine participants, comprising 15 patients with schizophrenia, 14 patients with bipolar disorders (DSM-IV) and 20 healthy controls were included in the study. FC was calculated using functional magnetic resonance imaging during a verbal fluency task between the activated pair-seed regions.
Results: Firstly, patients with schizophrenia presented a significantly reduced FC compared to controls within two pair-seed regions (medio-frontal cluster – left subcortical cluster and left fronto-lateral cluster – left subcortical cluster) while bipolar patients were not significantly different from healthy participants. Secondly, patients with schizophrenia compared to patients with bipolar disorders exhibited reduced FC within one pair-seed region (medio-frontal cluster – left subcortical cluster).

Conclusions: Our results support the hypothesis of a specific medio-prefronto-striato-thalamic functional dysconnectivity implicated in the pathophysiology of schizophrenia. This fronto-subcortical dysconnectivity in schizophrenia could underlie language production symptoms observed in this pathology and could be a functional brain marker of schizophrenia.

https://doi.org/10.1016/S0924-9338(15)30313-8 Published online by Cambridge University Press