Title of the project: Microvascular abnormality as an endophenotype of schizophrenia

Grant Agency: Ministry of Health
Project Number: 16-27243A
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Starting date: 01.04.2016
Duration (years): 4
Total funds allocated for project - Kč (thousands): 5910

Summary of 2017 results

Title of the presentation: Microvascular abnormality as an endophenotype of schizophrenia
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Schizophrenia affects about 0.5-1% of the population but, because of its chronic nature, is among the ten leading causes of disability. As such, schizophrenia has a major impact on social and health costs (Murray, 1996). Patient’s abilities to think clearly, to experience emotions, to respond adequately to commonly encountered life situations and to participate in normal social activities in a meaningful way are all severely compromised and this has a major impact on the affected individual’s quality of life. Even though most of the patients with schizophrenia are, at least to a degree, responsive to pharmacological intervention, satisfactory recovery is only achieved in about a third of them; about 20-40% of schizophrenic patients remain treatment resistant (Weinberger and Harrison, 2011).

The principal aims of the project are to investigate three well defined research groups – 80 schizophrenia patients, 80 mentally healthy relatives of the patients and 80 gender- and age-matched healthy controls,

a) to evaluate whether microvascular abnormality detected by retinal imaging and retinal parameters measured by OCT form a specific endophenotype in schizophrenia;
b) to identify genes of interest and their polymorphisms associated with microvascular abnormality detected by retinal imaging and retinal parameters measured by OCT in schizophrenia.
c) to determine whether retinal parameters can serve as a tool for research and prediction of schizophrenia

In December 2017, 39 patient-relative duos and 10 healthy volunteers have already been examined. The results of the research are recently calculated to be submitted for a publication in 2018.

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