One step closer to earlier diagnosis of bipolar disorder and psychoses

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In a new study from the Danish psychiatry project iPSYCH, researchers have identified genetic risk factors for developing bipolar disorder and psychoses among people with depression. In the longer term, the results may contribute to ensuring the correct diagnosis is made earlier, so that the patients can receive the correct treatment as quickly as possible.

Bipolar disorder and psychoses such as schizophrenia are serious mental disorders, which often have a great impact on a person's life and well-being. In a number of cases, bipolar disorder and schizophrenia are first diagnosed several years after the onset of the disorder. This is associated with unfavorable prognosis for the course of the disorders. The sooner the patient gets the correct diagnosis and begins targeted treatment, the better the prognosis. For this reason, researchers are aiming at identifying risk factors that will aid psychiatrists to reach the correct diagnosis as early as possible.

Depression often precedes bipolar disorder and psychoses

Many people who develop bipolar disorder or psychoses initially come into contact with the mental health services due to depression. A research team from iPSYCH therefore set out to examine a dataset consisting of 16,949 people aged 10-35 who had been treated for depression at a psychiatric hospital in Denmark.

"Our goal with the study was to investigate whether genetic factors are associated with an increased risk of developing bipolar disorder or psychosis among patients with depression. This knowledge can potentially be used in clinical practice to identify patients who should be monitored even more closely," explains the lead author of the research article based on the study, Senior Researcher Katherine Musliner from the National Centre for Register-based Research.

Among the factors the researchers looked into in the study was whether the genetic risk scores for bipolar disorder and schizophrenia—i.e. a person's individual genetic risk of developing these disorders—could possibly help psychiatrists determine which of their patients with depression was at greatest risk of subsequently developing bipolar disorder or a psychosis.

"One thing we discovered was that the genetic risk score for bipolar disorder is associated with an increased risk of developing bipolar disorder, and that the genetic risk score for schizophrenia is associated with an increased risk of developing a psychosis among patients who have been diagnosed with depression," says Katherine Musliner, stressing that the effect of the genetic risk scores were relatively small.

Family history weighs heavily

Another member of the research group behind the study, Professor Søren Dinesen Østergaard from the Department of Clinical Medicine and Aarhus University Hospital—Psychiatry, emphasizes that...
caution is needed when interpreting the results.

"At present, the genetic risk scores cannot contribute to early diagnosis of bipolar disorder and psychoses in clinical practice, but it cannot be ruled out that this could be the future scenario. On the other hand, our study confirms that having a parent with bipolar disorder or a psychosis is a strong predictor for the development of these particular disorders after depression. This underlines the importance of getting information about mental disorders in the family as part of the assessment of people suffering from depression," he explains.

The results have been published in the American Journal of Psychiatry.

Background for the results

The study is a register-based study with data from 16,949 people who were treated for depression at a psychiatric hospital in Denmark in the period from 1994 to 2016.


Provided by Aarhus University

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