Schizophrenics more likely to get autoimmune diseases


Schizophrenic people have a greater risk of developing diseases such as psoriasis, diabetes and MS than the general population. Infections appear to play a central role in the explanation, new study suggests.

People who suffer from schizophrenia have, on average, a 15-20-year shorter lifespan than the general population. The shorter lifetime is largely a result of physical diseases.

A new register study shows that schizophrenic patients have a 53-percent increased risk of developing so-called autoimmune diseases such as hepatitis, type 1 diabetes, multiple sclerosis (MS) and psoriasis.

The new study was headed by Michael Eriksen Benrós, MD, PhD, who is a senior researcher at the Danish National Centre for Register-based Research at Aarhus University and at the Psychiatric Centre in Copenhagen.

"We observed that six percent of the schizophrenic patients had an autoimmune disease that requires hospital treatment. However, the real incidence is significantly higher, as all those who receive treatment from general practitioners or have yet to be diagnosed were not included in our study,” he says.

“This is a sign that psychiatrists should watch out for all signs of physical disease in people with schizophrenia, and this also includes autoimmune diseases.”

The study, published in The American Journal of Psychiatry [8], also showed that schizophrenic patients who had previously been hospitalised or treated for a serious infection have a 2.7-fold risk of getting an autoimmune diagnosis, compared to the general population.

Huge register study

The study is based on data from the Danish central national register, hospitals and the nationwide Danish Translational Neuropsychiatry Unit. In total, the study includes data from 3.83 million people.

From this data, the researchers found that 39,364 people were diagnosed with schizophrenia in the period 1987-2010. During this same period, 142,328 people were diagnosed with an autoimmune disease. The researchers arrived at the risk figures for schizophrenia by linking data together in a complex statistical calculation.

The increased risk of contracting an autoimmune disease or an infection suggests that there may be a genetic component in the association between schizophrenia and diseases such as type 1 diabetes and MS.

"The study does not say anything about the cause of these associations, but it does show that there may be a genetic overlap between these diseases,” says Benrós.
“Maybe people suffering from schizophrenia are genetically vulnerable to the impact of infections, which increases the risk of not only schizophrenia, but also autoimmune diseases.”

This is possible since the human immune system responds to infections by producing antibodies, which not only fight the infection, but also start destroying the body’s own tissue.

**Confirmed hypothesis moves us closer to an answer**

According to Professor Thomas Werge, the research director at the Mental Health Services in the Capital Region of Denmark, the new findings are ground-breaking because they confirm and expand our understanding of the possible effect that the immune system has on brain function and mental illness:

“This is an important medical hypothesis that they have tested, and their suspicions have now been confirmed. And based on the great quality of the study, we now have a result that goes from being a mere hypothesis to providing a new basis for future research. Researchers now have a much more informed basis from which to uncover the specific disease mechanisms behind schizophrenia,” he says.

The study was carried out by researchers from the University of Copenhagen, Johns Hopkins University in the US and the National Centre for Register-based Research at Aarhus University, Denmark.

Next up for the team is a project that aims to combine register data with biological data so that possible interactions between genes and the environment can be examined.

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Read the Danish version of this article at [videnskab.dk](http://videnskab.dk) [9]

[Schizophrenic patients can improve the quality of their lives, and may even live longer, if doctors become more aware of the association between schizophrenia and diseases such as diabetes and multiple sclerosis. (Photo: Colourbox)](http://sciencenordic.com/schizophrenics-more-likely-get-autoimmune-diseases) [10]

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[Healthy people who hear voices help schizophrenics](http://sciencenordic.com/schizophrenics-more-likely-get-autoimmune-diseases) [12]

[Thomas Werge's profile](http://sciencenordic.com/schizophrenics-more-likely-get-autoimmune-diseases) [13]


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