

DIABETES

Linking diabetes and schizophrenia



The mortality gap between patients with schizophrenia and the general population is growing, and, in that context, our findings have major clinical implications



Rates of type 2 diabetes mellitus (T2DM) are higher in cohorts of patients with schizophrenia than in the general population, an association that is typically attributed to antipsychotic medications and poor lifestyle habits. New research published in *JAMA Psychiatry* reports that patients with first-episode schizophrenia exhibit impaired glucose homeostasis compared with healthy control individuals. These new data could suggest that patients with schizophrenia have an inherent risk of developing T2DM.

The meta-analysis conducted by Toby Pillinger and colleagues included studies that provided fasting glucose concentration, glucose concentration following the oral glucose tolerance test (OGTT), fasting insulin and insulin resistance derived from homeostatic model assessment. To limit the effects of exposure to antipsychotic drugs, the authors only included patients who had been prescribed antipsychotics for ≤ 2 weeks.

The team demonstrated that individuals with first-episode schizophrenia have increased levels of fasting glucose, raised levels of

glucose post-OGTT, raised levels of fasting insulin and increased insulin resistance, compared with matched controls. The results remained significant in sensitivity analyses that focused on patients and controls that were matched for diet, levels of regular exercise and ethnicity, and also in analyses that only considered entirely antipsychotic naive patients.

“We recognize that our findings might still, at least in part, reflect poorer lifestyle habits in patients with schizophrenia,” says Pillinger. “There are, however, other mechanisms that could be contributing to the association between schizophrenia and T2DM, for example, common susceptibility genes and shared developmental risk factors, such as maternal malnutrition.”

The authors hope that their findings will encourage health practitioners to consider diabetes prevention from the onset of schizophrenia. “The mortality gap between patients with schizophrenia and the general population is growing, and, in that context, our findings have major clinical implications,”

concludes Pillinger. “There is a need for clinicians to select an appropriate antipsychotic at an appropriate dose so as to limit the risk of developing diabetes, provide patient education regarding diet and exercise, ensure regular screening for diabetes, and offer prompt management to those who go on to develop diabetes.”

Alan Morris

ORIGINAL ARTICLE Pillinger, T. et al. Impaired glucose homeostasis in first-episode schizophrenia: a systematic review and meta-analysis. *JAMA Psychiatry* <http://dx.doi.org/10.1001/jamapsychiatry.2016.3803> (2017)

