Researchers discover link between schizophrenia and diabetes

March 30 2009

People with schizophrenia are at increased risk for type 2 diabetes, Medical College of Georgia researchers have found. In a study of 50 people newly-diagnosed with schizophrenia or a related psychotic disorder with no other known risk factors, 16 percent had either diabetes or an abnormal rate of glucose metabolism, says Dr. Brian Kirkpatrick, vice chair of the MCG Department of Psychiatry and Health Behavior. Credit: Medical College of Georgia

People with schizophrenia are at increased risk for type 2 diabetes, Medical College of Georgia researchers have found.

In a study of 50 people newly-diagnosed with schizophrenia or a related

psychotic disorder with no other known risk factors, 16 percent had either diabetes or an abnormal rate of glucose metabolism, says Dr. Brian Kirkpatrick, vice chair of the MCG Department of Psychiatry and Health Behavior. In a similar size control group of people without schizophrenia, none had signs of or had developed the disease.

People with diabetes cannot produce or properly use insulin, a hormone that converts glucose, starches and other food into energy.

"These findings point toward there being some shared environmental factors or genetic factors between the development of schizophrenia and diabetes," he says.

Dr. Kirkpatrick presented his findings at the International Congress on Schizophrenia Research in San Diego March 28-April 1.

Researchers have long suspected that schizophrenia led to an increased risk of diabetes, Dr. Kirkpatrick says.

To find out whether there was a link, he and colleagues at the University of Barcelona in Spain and the University of Maryland administered a two-hour oral glucose test to patients who had not yet been placed on anti-psychotic medication. Catching them before prescriptive treatment was important because researchers already knew that some of the most effective schizophrenia drugs also cause rapid weight gain - a risk factor for type 2 diabetes.

"We know the medicine causes problems but we wanted to know whether the disease also causes them," he says.

Schizophrenia symptoms include memory and attention problems, hallucinations, disorganized thinking and behavior and delusions. Psychotic symptoms typically start in late adolescence and early

adulthood. But researchers believe that developmental abnormalities they don't yet know about also increase diabetes risk.

One recent study - based on data from the Clinical Antipsychotic Trials of Intervention Effectiveness Schizophrenia Trial - showed the prevalence rate of metabolic syndrome, a group of risk factors that include abdominal obesity, high lipid and cholesterol blood levels and insulin resistance, is more than 50 percent in women and about 37 percent in men with schizophrenia.

"Many people focus on the brain function part of the disease, but patients also have other medical problems that can't be attributed to other factors," Dr. Kirkpatrick says. "Bad things that happen in utero and at birth, such as prenatal famine and low birth weight, have both been shown to increase the risk of diabetes and schizophrenia. Problems in early development can leave a lasting impact."

Establishing the link between the diseases may help scientists further understand the genetics of schizophrenia, he says.

"And that may eventually enable some sort of intervention strategy."

Source: Medical College of Georgia