

Depression may lead to Type 2 diabetes

Study shows older adults more likely to be affected

By Bonnie Kath | Special to the Tribune

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Type 2 diabetes generally is thought to be a disease of lifestyle, with obesity and inactivity being primary causes. But medical researchers also see a relationship between chronic depression and development of this adult-onset diabetes. A recent study suggests for the first time that even adults ages 65 and older who are chronically depressed are more likely to develop this inability to produce enough insulin to get rid of excess blood sugar.

Mercedes Carnethon, an epidemiologist and assistant professor of preventive medicine at the Northwestern University Feinberg School of Medicine, led the team that conducted this data analysis. They used information that the National Institutes of Health had gathered annually from more than 4,600 people 65 and older who were not diabetic at the beginning of the 10-year study. These people had responded to the Center for Epidemiological Studies Depression Scale, answering questions about mood, irritability, energy level, concentration and sleep.

Carnethon's team adjusted statistically for weight and activity levels, because people who report high depressive symptoms tend to be less physically active, which can lead to obesity. "When we accounted for that," Carnethon said, "we still saw that high depressive symptoms were associated with the development of diabetes."

Her data showed that, independent of weight and activity levels, the older adults who reported high depressive symptoms were 50 percent more likely to develop diabetes than those who did not.

Carnethon had decided to check this age group for a connection between depression and diabetes because older adults have a high prevalence of depression, explaining, "So we have a population that's at particularly high risk for having high depressive symptoms and a population that has the highest prevalence of [Type 2] diabetes across the age groups."

Carnethon cited studies psychologists have done that "provide a reasonable hypothesis for how a depressed person might develop diabetes. ... A number of studies show some of the effects that depression has on the autonomic nervous system," which automatically controls functions of the body. She said depression essentially shifts the autonomic nervous system from a resting state, during which the body uses its insulin to process and get rid of blood sugar, to a responsive state, during which the body shuts down insulin production and holds the blood sugar in reserve so that the body will have enough energy to deal with threats. "So depression is essentially a stressful state to the body, which is causing the body not to process foods and sugars appropriately. ...

"The primary implication that I would have people take away is that depression is important for many reasons other than its effects on mood, because of the effects that it can have on overall health."

She encourages older adults who are experiencing chronic depression to see their doctors for a full health evaluation.

Dr. Patrick J. Lustman, professor of psychiatry at Washington University School of Medicine in St. Louis, has been studying this link between depression and diabetes for much of his career.

He found that "in about 90 percent of people diagnosed with both depression and Type 2 diabetes,

depression preceded diabetes"; and he cited the work of several colleagues who have come to similar conclusions.

"The new study by Dr. Carnethon and colleagues, using scientifically rigorous methods, now extends these earlier findings to elderly patients, the age group with the highest risk for diabetes," he said.

"Confirmation of the risk of depression in this most recent study by Dr. Carnethon makes me wonder when we as a society are going to recognize that depression is a medical risk factor."

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