

## **Are Patients with Depression at Greater Risk for Diabetes and Heart Disease?**

It might be surprising, but individuals who suffer from depression are also at increased risk for several medical conditions, including type-2 diabetes, obesity, stroke, and heart disease. Often, risk factors for these medical conditions are recognizable many years in advance of the full-fledged disorders. Doctors sometimes refer to this state of co-occurring risk factors as the “metabolic syndrome”—indicating the presence of an abnormality in the body’s metabolism. The metabolic syndrome includes such symptoms as obesity (particularly abdominal obesity or a “pot belly”), high blood pressure, elevated cholesterol/triglyceride levels, and increased blood sugar. The metabolic syndrome may explain why patients with mood disorders, including bipolar disorder and major depression, die earlier from medical causes as compared with the general population.

Several lines of evidence indicate that the metabolic syndrome and depression share similar relationships. For instance, women with a history of depression who were followed for 15 years were found to develop metabolic syndrome at much higher rates than non-depressed women. Some researchers have even found a link between body weight or metabolic syndrome and higher rates of attempted suicide. Both depression and metabolic syndrome may induce the release of specific signaling molecules called “cytokines” from cells in the body. Not only may these cytokines produce symptoms that can mimic depression (e.g. fatigue, irritability, loss of motivation) but they may contribute to the elevated cardiac mortality associated with depression. In addition, individuals with depression often have higher levels of body cortisol, a hormone known to raise blood sugar levels. Increased levels of cortisol in the setting of depression may contribute to the development of type-2 diabetes.

For these reasons, all patients with a mood disorder should be regularly assessed for medical risk factors such as the metabolic syndrome. A healthier body may be the key to a healthier mind. Your doctor can determine if you are at risk by measuring simple blood tests and body parameters. When patients with metabolic syndrome are identified early and treatment is initiated, you may greatly decrease your risk of developing more serious problems such as a heart attack or stroke. In some instances, the intervention may be as simple as changing your diet.

At the Mood Disorders Program, we are dedicated to improving your overall health. To learn more about depression or the metabolic syndrome, contact us at 216/844-2865. Dr. Kemp is an Instructor of Psychiatry at University Hospitals Case Medical Center.