

A STUDY ON HOW DOES STRESS AND ANXIETY AFFECTS DIABITIES

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Introduction

Diabetes

Diabetes is a disorder that affects the way our body uses food for energy. Normally, the sugar we take in is digested and broken down to a simple sugar, known as glucose. The glucose then circulates in our blood where it waits to enter cells to be used as fuel. Insulin, a hormone produced by the pancreas, helps move the glucose into cells. A healthy pancreas adjusts the amount of insulin based on the level of glucose. But, if one has diabetes, this process breaks down, and blood sugar levels become too high.

There are two Main Types of Diabetes

Type 1 diabetes: results from the body's failure to produce insulin, and presently requires the person to inject insulin. (Also referred to as insulin-dependent diabetes mellitus, IDDM for short, and juvenile diabetes.)

Type 2 diabetes: results from insulin resistance, a condition in which cells fail to use insulin properly, sometimes combined with an absolute insulin deficiency. (Formerly referred to as non-insulin-dependent diabetes mellitus, NIDDM for short, and adult-onset diabetes.) Gestational diabetes: is when pregnant women, who have never had diabetes before, have a high blood glucose level during pregnancy. It may precede development of type 2 DM.

Difference between Type 1 and Type 2

The biggest difference is found in the production of insulin. In type 1, insulin production stops. In type 2, the pancreas continues to make insulin, but it is not enough to keep the glucose in balance. It's also possible that the pancreas is making adequate amounts of

insulin, but the body uses it poorly (called insulin resistance), most often because the person is overweight. The vast majority of those who have been diagnosed with diabetes have type 2.

Causes of Diabetes

Type 1 diabetes: Type 1 diabetes is believed to be an autoimmune disease. The body's immune system attacks the cells in the pancreas that produce insulin. A predisposition to develop type 1 diabetes may run in families, but genetic causes (a positive family history) are much more common for type 2 diabetes. Environmental factors, including common unavoidable viral infections, may also contribute.

Type 1 diabetes is most common in people of non-Hispanic, Northern European descent (especially Finland and Sardinia), followed by African Americans, and Hispanic Americans. It is relatively rare in those of Asian descent. Type 1 diabetes is slightly more common in men than in women.

Type 2 diabetes: Type 2 diabetes has strong genetic links, meaning that type 2 diabetes tends to run in families. Several genes have been identified and more are under study which may relate to the causes of type 2 diabetes. Risk factors for developing type 2 diabetes include the following:

- High blood pressure
- High blood triglyceride (fat) levels
- Gestational diabetes or giving birth to a baby weighing more than 9 pounds
- High-fat diet
- High alcohol intake
- Sedentary lifestyle
- Obesity or being overweight

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Ethnicity, particularly when a close relative had type

2 diabetes or gestational diabetes: certain groups, such as African Americans, Native Americans, Hispanic Americans, and Japanese Americans, have a greater risk of developing type 2 diabetes than non-Hispanic whites.

Aging: Increasing age is a significant risk factor for type 2 diabetes. Risk begins to rise significantly at about age 45 years, and rises considerably after age 65 years.

Complications of Diabetes

Both forms of diabetes ultimately lead to high blood sugar levels, a condition called hyperglycemia. Over a long period of time, hyperglycemia damages the retina of the eye, the kidneys, the nerves, and the blood vessels. Damage to the retina from diabetes (diabetic retinopathy) is a leading cause of blindness. Damage to the kidneys from diabetes (diabetic nephropathy) is a leading cause of kidney failure. Damage to the nerves from diabetes (diabetic neuropathy) is a leading cause of foot wounds and ulcers, which frequently lead to foot and leg amputations. Damage to the nerves in the autonomic nervous system can lead to paralysis of the stomach (gastroparesis), chronic diarrhea, and an inability to control heart rate and blood pressure during postural changes. Diabetes accelerates atherosclerosis, (the formation of fatty plaques inside the arteries), which can lead to blockages or a clot (thrombus). Such changes can then lead to heart attack, stroke, and decreased circulation in the arms and legs (peripheral vascular disease). Diabetes predisposes people to high blood pressure and high cholesterol and triglyceride levels. These conditions independently and together with hyperglycemia increase the risk of heart disease, kidney disease, and other blood vessel complications.

How Does Stress Affect Health?

Controlling stress is important to our health. Unrelenting stress can turn to distress. Stress is the body's reaction to any change that requires a physical, mental, or emotional adjustment or response. Stress is a normal part of life. Many events that happen to you and around you -- and many things that you do to

yourself -- put stress on your body. Some stress can be good. It keeps us alert, motivated, and ready to avoid danger. But too much stress can make us sick. Stress that continues without relief can lead to a condition called distress -- a negative stress reaction. Distress can disturb the body's internal balance or equilibrium, leading to physical symptoms such as headaches, an upset stomach, elevated blood pressure, chest pain, sexual dysfunction, and problems sleeping. Emotional problems can also result from distress. These problems include depression, panic attacks, or other forms of anxiety and worry. Research shows that stress also can bring on or worsen certain symptoms or diseases. Stress is linked to six of the leading causes of death: heart disease, cancer, lung ailments, accidents, cirrhosis of the liver, and even suicide. Stress also becomes harmful when people engage in the compulsive use of substances or behaviors to try to relieve their stress. These substances or behaviors may include food, alcohol, tobacco, drugs, gambling, sex, shopping, and the Internet. Rather than relieving the stress and returning the body to a relaxed state, these substances and compulsive behaviors tend to keep the body in a stressed state causing more problems. The distressed person becomes trapped in a vicious circle.

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