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An Over View of Hyperglycemia

Erkan Sari *

Department of Biotechnology, University of Ankara, Ankara, Turkey

*Corresponding author: Erkan Sari, Department of Biotechnology, University of Ankara, Ankara, Turkey, E-mail: erkansari@gmail.com

DESCRIPTION

Hyperglycemia occurs when there is an abnormally high level of sugar in the blood. This occurs when the body has insufficient insulin (the hormone that transports glucose into the blood) or when the body is unable to properly use insulin. Blood glucose levels reflect the dynamic balance between dietary glucose absorption and hepatic glucose production on the one hand, and glucose uptake and utilization by peripheral tissues on the other. Except for dietary glucose absorption, the hormone insulin and to a lesser extent, other counter-regulatory hormones such as glucagon, catecholamine's, cortisol, and growth hormone regulate these complex and interrelated processes. Hyperglycemia is caused by an imbalance in the processes that control blood glucose levels.

Hyperglycemia is defined as blood glucose levels of more than 125 mg/dL (milligrams per deciliter) while fasting (not eating for at least eight hours). If hyperglycemia is untreated for an extended period of time, it can damage their nerves, blood vessels, tissues, and organs. Damage to blood arteries can increase the chance of a heart attack or stroke, and nerve problems can result in vision problems, kidney damage, and wounds that don't heal.

Symptoms of hyperglycemia do not appear until glucose levels are significantly elevated usually above 180 to 200 milligrams per deciliter (mg/dL), or 10 to 11.1 mill moles per liter. Hyperglycemia symptoms appear gradually over several days or weeks. Hyperglycemia symptoms may include increased hunger and/or thirst, frequent urination, blurred vision, headache, fatigue is one of the additional symptoms (feeling weak, tired), loss of weight, and infections of the vaginal and skin. Ketoacidosis causes the symptoms like vomiting, dehydration, hyperventilation or deep laborious breathing, rapid heartbeat, psychological self and disorientation, coma.

Treatment

A person with diabetes can take steps to reduce, prevent, and treat blood glucose spikes. These steps are as follows:

- Blood sugar monitoring is a critical for a diabetic patient to track their blood sugar levels as prescribed by their doctor. This assists

in detecting hyperglycemia before it becomes a problem.

- Physical activity consumes excess glucose in the blood. However, if a person has severe hyperglycemia and has ketones in their urine, they should avoid exercise. Exercise causes fat breakdown and may hasten ketoacidosis.
- Controlling portions at mealtimes as well as monitoring carbohydrate quality and quantity, that everything help to keep the amount of glucose in the body manageable. A registered dietician can help someone gradually and healthfully adjust their diet.
- Medication changes means if a person's blood sugar levels remain elevated, a doctor may advise them to change the timings or types of medication and insulin they take.
- Stress management involves excessive stress can have an effect on hormones and blood sugar levels. It is critical for diabetics to find ways to manage stress, such as by focusing on improving sleep and conducting experiments with relaxation techniques such as meditation.

Prevention

- Exercise can help lower blood sugar levels. Maintain daily activity plan with your healthcare provider.
- Keep to your meal plan, if you have one. Learn how carbohydrates affect your blood sugar and collaborate with your diabetes care team to develop the best meal plan for you.
- Maintain a healthy weight.
- Avoid smoking.
- Limit alcohol consumption. Alcohol can cause dangerously low blood sugar levels, but it can also cause dangerously high blood sugar levels. Determine how much is safe to drink with the help of your provider.