

Diabetes mellitus and its association with vascular disease

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Introduction

Diabetes and cardiovascular disease are two of the most common health problems worldwide. Diabetes frequently leads to the development of vascular disease, so the two are inextricably linked. Vascular disease is a condition in which the blood vessels that supply the body with oxygen and nutrients become damaged or blocked, resulting in serious health problems. In this article, we will look at the connection between diabetes and vascular disease, as well as the risk factors for both and how to prevent and manage them.

Glucose, a type of sugar that is the body's primary source of energy, is processed differently by diabetes, a metabolic disorder. The pancreas secretes the hormone insulin, which aids in controlling blood glucose levels. Diabetes causes high blood sugar levels because the body either doesn't produce enough insulin or doesn't use it effectively [1-5].

A condition known as atherosclerosis can develop as a result of blood vessel damage brought on by high blood sugar levels over time. The accumulation of plaque in the arteries known as atherosclerosis can obstruct blood flow to crucial organs and tissues, resulting in serious health issues like heart attacks, strokes, and kidney disease. Diabetes significantly increases a person's risk of developing atherosclerosis compared to the general population [6-10].

■ Risk factors for diabetes and vascular disease

There are a number of risk factors for both vascular disease and diabetes, including: **Obesity:** Both conditions are more likely to develop in people who are overweight or obese. **Sedentary lifestyle:** Diabetes and vascular disease can both be brought on by inactivity. **Blood vessel damage and atherosclerosis risk** are both increased by high blood pressure. **High LDL levels,** also known as "bad" cholesterol, can cause atherosclerosis. **Family history:** Both vascular disease and diabetes are influenced by genetics. **Smoking:** Smoking harms blood vessels and raises the chance of developing atherosclerosis.

■ Preventing and managing diabetes and vascular disease

1. It can take a number of precautions to avoid and manage diabetes and vascular disease, such as: sustaining a healthy way of life for the prevention and management of diabetes and vascular disease, a healthy diet, regular exercise, and weight maintenance are essential.
2. The control of blood sugar levels: Diabetes long-term complications can be avoided by monitoring blood sugar levels and taking medication as directed. Taking prescribed medications as directed, following a low-salt diet, and cutting back on saturated fats in the diet can all help manage blood pressure

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and cholesterol levels. One of the most crucial steps can take to prevent and manage vascular disease is to stop smoking.

■ **Conclusion**

Two of the most prevalent medical conditions in the world are diabetes and vascular disease, and these two conditions are closely related. Diabetes increases the risk of vascular disease by causing atherosclerosis and blood vessel damage. Obesity, a sedentary lifestyle, high blood pressure, high

cholesterol, family history, and smoking are a few risk factors that both conditions have in common. Fortunately, there are a number of actions take to prevent and manage diabetes and vascular disease, such as leading a healthy lifestyle, controlling blood sugar, blood pressure, and cholesterol levels, quitting smoking, and scheduling routine checkups with doctor. It can lower risk of acquiring these conditions and live a healthier, happier life by adopting the proper strategy.

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