



Clinical Medications and Risk Factors of Stroke in Diabetes

Cardona Chanson*

Department of Endocrinology, Heinrich-Heine-University, Duesseldorf, Germany

DESCRIPTION

Diabetes increases the chance of a stroke, which damages brain tissue and can lead to disability and even death. Diabetics need to control their blood sugar, blood pressure, cholesterol, and weight to prevent stroke. We should be aware of the symptoms of stroke and approach doctor immediately. Diabetes can also make it harder for the body to respond to a stroke. Other arteries usually act as bypasses when the oxygen supply is cut off. However, with diabetes, these blood vessels can become hard and clogged with plaque. This is a condition known as atherosclerosis. This makes it harder for blood to reach the brain[1].

A diabetic adult is 1.5 times more likely to have a stroke than a non-diabetic. They are also almost twice as likely to die from heart disease and stroke as non-diabetics. High blood pressure is a major risk factor for stroke. Others include cigarette smoking and high levels of Low-Density Lipoprotein (LDL) bad cholesterol[2]. Diabetes affects the body's ability to produce or use insulin properly. Because insulin plays a key role in producing glucose from the bloodstream into the cells, diabetics often have excess sugar in their blood. It can contribute to the formation of blood clots, or fatty deposits, in blood vessels that supply blood, and this process is known as arteriosclerosis. As these deposits grow, they can narrow or completely block the walls of blood vessels. When blood flow to the brain is interrupted, blood and oxygen cannot reach brain cells this can lead to stroke. Without positive treatment, stroke can cause permanent cell damage or death[3].

Diabetic stroke connection

The diabetes prevents the body from processing the food properly by which glucose uses blood sugar for energy. Most of the food was broken down into glucose for energy. Glucose enters a person's bloodstream and travels to cells throughout the body after food is digested. In order for glucose to be taken up by cells to provide energy, a hormone called insulin is required. The pancreas is responsible for producing the right amount of this insulin. In people with Type 1 diabetes (previously called juvenile diabetes)

the pancreas does not produce insulin. In people with Type 2 diabetes, either the pancreas produces too little insulin or the muscle, liver, and fat cannot use it properly. As a result, untreated diabetics accumulate too much glucose in their blood, which prevents their cells from getting enough energy. Over time, high blood sugar can lead to increased fat deposits or blood clots in the blood vessels [4].

Diabetes increases the risk of stroke, but there are ways to reduce the risk, including by having diabetes medication regularly and regular diabetes check-ups. These monitor blood sugar, blood pressure, cholesterol, and kidney function [5].

CONCLUSION

People with diabetes are more likely to have a stroke than people without the disease. Stroke is the fifth leading cause of death and the leading cause of disability in few countries. After a stroke, some people recover completely, while others have persistent symptoms. Positive treatment reduces the risk of long-term complications. People are taking steps to prevent stroke by maintaining a healthy lifestyle and managing risk factors such as controlling diabetes symptoms, eating a varied and nutritious diet, and exercising regularly. Recovery can take weeks or years, depending on the type of stroke and its effects, and some people have minor strokes.

REFERENCES

1. Osei E, Fonville S, Zandbergen AA, Koudstaal PJ, Dippel DW, den Hertog HM. Impaired fasting glucose is associated with unfavorable outcome in ischemic stroke patients treated with intravenous alteplase. *J Neurol*. 2018; 265(6): 1426- 1431.
2. Gray CS, Hildreth AJ, Sandercock PA, O'Connell JE, Johnston DE, Cartlidge NE, et al. Glucose-potassium-insulin infusions in the management of post-stroke hyperglycaemia: the UKGlucose Insulin in Stroke Trial (GIST-UK). *Lancet Neurol*. 2007; 6(5): 397- 406.
3. Janghorbani M, Hu FB, Willett WC, Li TY, Manson JE, Logroscino G, et al. Prospective study of type 1 and type 2 diabetes and risk of stroke subtypes: the Nurses' Health Study. *Diabetes Care*. 2007;30: 1730-1735.

Correspondence to: Cardona Chanson, Department of Endocrinology, Heinrich-Heine-University, Duesseldorf, Germany, E-mail: chanson_c@hotmail.com

Received: 17-Oct-2022, Manuscript No. DCRS-22-18958; **Editor assigned:** 20-Oct-2022, PreQC No. DCRS-22-18958 (PQ); **Reviewed:** 09-Nov-2022, QC No DCRS-22-18958; **Revised:** 18-Nov-2022, Manuscript No. DCRS-22-18958 (R); **Published:** 28-Nov-2022, DOI: 10.35841/2572-5629.22.7.136

Citation: Chanson C (2022) Clinical Medications and Risk Factors of Stroke in Diabetes. *Diabetes Case Rep*. 7:136.

Copyright: © 2022 Chanson C. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

4. Kissela BM, Khoury J, Kleindorfer D, Woo D, Schneider A, Alwell K, et al. Epidemiology of ischemic stroke in patients with diabetes: the greater Cincinnati/Northern Kentucky Stroke Study. *Diabetes Care*. 2005; 28:355-359.
5. Wild S, Roglic G, Green A, Sicree R, King H. Global prevalence of diabetes: estimates for the year 2000 and projections for 2030. *Diabetes Care*. 2004; 27:1047-1053.