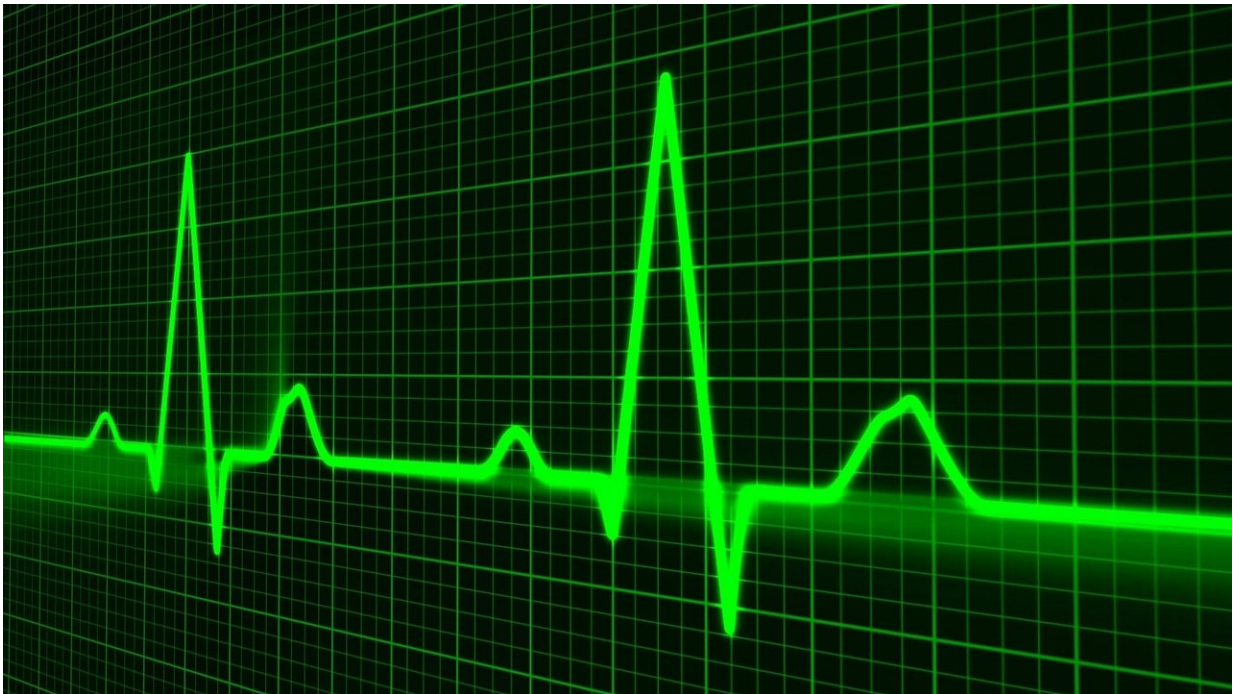


People with AFib and diabetes were less likely to notice irregular heartbeat

November 10 2021



Credit: CC0 Public Domain

Adults with type 1 or type 2 diabetes and atrial fibrillation were less likely to notice symptoms of irregular heartbeat, more likely to have a lower quality of life and experienced more coexisting health conditions than people with atrial fibrillation who did not have type 1 or type 2 diabetes, according to new research published today in the *Journal of the American Heart Association*.

At least 2.7 million Americans live with atrial [fibrillation](#), often called AFib, which is an irregular heartbeat or arrhythmia that can lead to [blood clots](#), stroke, [heart failure](#) and other heart-related complications. By 2030, the number of people in the U.S. with AFib is expected to climb to an estimated 12.1 million. Chronic health conditions including type 1 or type 2 [diabetes](#), asthma and hyperthyroidism are known to increase the risk of AFib.

"Since diabetes is one of the major risk factors for AFib, our team investigated whether patients with and without diabetes differ in terms of atrial fibrillation symptoms and complications," said study author Tobias Reichlin, M.D., professor of cardiology at Bern University Hospital at the University of Bern in Bern, Switzerland. "This research can provide insights on improving the management of atrial fibrillation and prevention of its complications."

Researchers studied 2,411 patients diagnosed with atrial fibrillation who were enrolled at 14 health care centers in Switzerland from 2014 to 2017 as part of the Swiss-AF (Swiss Atrial Fibrillation) Study. The average age of the study's participants was approximately 74 years, and about 27% were women.

Upon enrollment in the study, participants were required to receive a clinical examination, blood sampling, cognitive assessment, quality of life assessment and 5-minute resting ECG (electrocardiogram). About 17% of the study participants were diagnosed with diabetes, according to their medical records and if they were taking any diabetes medications; they were not classified by the U.S. standards of type 1 or type 2 diabetes. Among the study participants diagnosed with diabetes, they were further categorized as having either insulin-dependent diabetes or non-insulin dependent diabetes, both of which included people with type 1 and type 2 diabetes as defined in the U.S.

To determine how diabetes may affect AFib patients, researchers compared AFib symptoms, quality of life outcomes, cardiac comorbidities and neurological comorbidities among participants with and without diabetes. Compared to people with AFib who did not have diabetes:

- People with diabetes were about 25% less likely than those without diabetes to recognize common symptoms of atrial fibrillation such as a rapid heartbeat;
- People with diabetes were three times more likely than those without diabetes to have high blood pressure; 55% more likely to have had heart attacks; and about twice as likely to have heart failure; and
- People with diabetes had a 39% increased stroke risk and were 75% more likely to have cognitive impairment.

"It is remarkable to find that patients with diabetes had a reduced recognition of atrial fibrillation symptoms," Reichlin said. "The reduced perception of atrial fibrillation symptoms may result in a delayed diagnosis of atrial fibrillation, and, consequently, more complications such as stroke. Our findings raise the question of whether patients with diabetes should be routinely screened for atrial fibrillation."

When researchers examined specific areas related to quality of life, they also found that having diabetes and AFib negatively impacted mobility, self-care and normal activities more so than for the people without diabetes.

"These important new findings from the large Swiss AF study show compared to AFib patients without diabetes, those with diabetes were less likely to experience any symptom related to [atrial fibrillation](#)," said Prakash Deedwania, M.D., a member of the scientific advisory board for Know Diabetes By Heart (KDBH), a joint initiative of the American

Heart Association and the American Diabetes Association, the immediate past chair of the American Heart Association Diabetes Committee and a professor of medicine at the University of California, San Francisco School of Medicine. "These results were seen even though people with diabetes and AFib had more coexisting [health conditions](#) such as high blood pressure, as well as a history of heart attack and heart failure. Keeping these new observations in mind, along with the serious consequences of failing to recognize AFib in time, it seems prudent to consider screening older patients with diabetes for AFib so that treatment may be initiated when appropriate."

The researchers note several potential limitations to this research. The diagnosis of diabetes was based on the medical history of the study's participants rather than laboratory criteria; therefore, the prevalence of diabetes may have been underreported. Also, data was not available on the duration of diabetes or the degree of glycemic control. Additionally, the study included only residents of Switzerland, therefore, the generalizability of the findings to other populations or people living in other countries requires further investigation. Future studies among larger, more diverse populations of people are needed to confirm these findings.

More information: Association of Diabetes With Atrial Fibrillation Phenotype and Cardiac and Neurological Comorbidities: Insights From the Swiss-AF Study, *Journal of the American Heart Association* (2021). [DOI: 10.1161/JAHA.121.021800](https://doi.org/10.1161/JAHA.121.021800)

Provided by American Heart Association

Citation: People with AFib and diabetes were less likely to notice irregular heartbeat (2021, November 10) retrieved 19 April 2024 from <https://medicalxpress.com/news/2021-11-people->

afib-diabetes-irregular-heartbeat.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.