

Extreme glucose levels in diabetic patients with heart failure linked to increase risk of deaths

July 20 2009

Compared with patients with moderately controlled glucose levels, diabetic patients who have heart failure and either too high or too low glucose levels may be at increased risk of death, said researchers at Baylor College of Medicine in a report published in the current issue of *Journal of the American College of Cardiology*.

To determine average [glucose levels](#) in the blood over a two to three month period, doctors measure glycosylated hemoglobin (the oxygen-carrying protein in the blood that is bound to the [sugar glucose](#)). In general, higher levels have been associated with increased risk of heart disease, said Dr. David Aguilar, assistant professor of medicine - cardiology at BCM.

"Most doctors try to keep glucose levels of those with diabetes as low as they can to lower the risk of complications such as eye problems, kidney disease or the development of heart disease," said Aguilar, senior author of the study. "However, we found that in diabetic patients with [heart failure](#), glucose levels slightly higher than what are normally recommended had the lowest risk of death."

Researchers at BCM and the Michael E. DeBakey Veterans Affairs Medical Center in Houston identified 5,815 veterans with heart failure and diabetes who were receiving treatment at VA medical centers across the nation. They followed the patients for two years, dividing them into

five categories based on their glycosylated hemoglobin levels.

Most medical professionals recommend levels at 7 and below as the target for optimal health for diabetic patients. However, the results of the study of diabetic patients with heart failure showed that those with levels 7.1 to 7.8 had the lowest rate of death. Those patients at both ends of the spectrum had the higher death risks.

"This doesn't mean that diabetic patients with heart failure should change their target goal for glucose levels," Aguilar said. "The results could simply be telling us that the glycosylated hemoglobin levels are a marker for other risks that are contributing to increased risk of death, but not necessarily the cause of the problem."

Aguilar said the correlation needs to be further investigated to confirm the findings and see what other factors could be contributing to the mortality rate.

Source: Baylor College of Medicine ([news](#) : [web](#))

Citation: Extreme glucose levels in diabetic patients with heart failure linked to increase risk of deaths (2009, July 20) retrieved 23 April 2024 from <https://medicalxpress.com/news/2009-07-extreme-glucose-diabetic-patients-heart.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.