

Diabetic women at 34 percent higher risk of heart attack than diabetic men as they age

September 14 2015

New research presented at this year's annual meeting of the European Association for the Study of Diabetes in Stockholm shows that diabetic women are more at risk than diabetic men of having a heart attack and other complications as they age. The study is by Dr Giuseppe Seghieri, Regional Health Agency, Florence, Italy, and colleagues.

Previous research has revealed that diabetic women have a higher risk of [cardiovascular events](#) than diabetic men, when compared with the respective non-diabetic counterparts. However, it is unclear when this risk begins or how long it lasts. Thus the authors did a retrospective follow-up study along a period of eight years (from 2005 to 2012) of a cohort of [diabetic patients](#) living in Tuscany, a region of central Italy, comparing between genders the effect of age on diabetes related excess risk of hospitalisation for [acute heart attack](#) ([acute myocardial infarction](#) or AMI), ischemic stroke (IS), and congestive heart failure (CHF).

The authors pooled data from all Tuscan hospitals over the period 2005 to 2012, the general population registry of all inhabitants of Tuscany and a dataset containing the registry of all known diabetic patients from Tuscany. The effect of diabetes was separately measured in men and in women across this entire eight year period. In a total of 3,192,203 inhabitants aged more than 16 years (47% males), there were 24,605 hospitalisations for AMI (16,251 in men and 8,354 in women), 26,953 for IS (14,848 in men and 12,105 in women), 17,628 for CHF (8,403 in men and 9,225 in women).

After adjusting for age, the diabetes related excess risk, expressed as hazard ratio was, overall, significantly higher in women than in men hospitalised for AMI (2.63 times [increased risk](#) vs. 1.96 times for men, giving a relative increased risk of 34% in women). However the increased risk was overall similar between genders for those hospitalised for IS and CHF. After stratifying the population by age decades, however, diabetic women hospitalised for AMI had a significantly higher excess risk than diabetic men, along the entire age interval between decade 45-54 years up to age 75-84 years, with the highest difference found in age class 45-54 years (increased risk 5.83 times in women vs. 2.88 in men). In patients hospitalised for IS and CHF diabetic women had an excess risk higher than men from age 55-64 years up to 75-84 years, with the highest difference in age decade 55-64yr in both (4.14 v 3.05 for IS and 6.83 v 4.11 for CHF).

The authors conclude: "In this cohort of Tuscan population the excess risk of cardiovascular events linked with diabetes is significantly different between genders. With respect to AMI, diabetic women are more disadvantaged, compared to diabetic men, with a gender driven 'risk window' for women which mostly opens around menopausal age (45 years onwards). Regarding IS and CHF, it opens later, in the postmenopausal [age](#) (55 years and over), and to a lesser extent. All this should focus attention on a timely, gender oriented, prevention of cardiovascular events in people with diabetes."

They add: "The risk for [heart attack](#) is different to that from the risk of stroke or CHF: both stroke and CHF appear on average later in the life than heart attacks, at a time when the risk associated with diabetes becomes smaller and smaller: thus gender difference in diabetes linked excess risk is smaller for IS and CHF. In addition the global burden of risk of stroke and/or CHF is built up with other elements—including atrial fibrillation, hypertension, salt intake—which altogether reduce the importance of [diabetes](#) itself."

Provided by Diabetologia

Citation: Diabetic women at 34 percent higher risk of heart attack than diabetic men as they age (2015, September 14) retrieved 11 May 2024 from <https://medicalxpress.com/news/2015-09-diabetic-women-percent-higher-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.