

High cholesterol riskier for middle-aged men than women

August 16 2013

High cholesterol levels are much more risky for middle-aged men than middle-aged women when it comes to having a first heart attack, a new study of more than 40,000 Norwegian men and women has shown.

The study, just published in the September issue of *Epidemiology*, shows that being a middle-aged male and having high cholesterol levels results in a negative [synergistic effect](#) that the researchers did not observe in women. However, current clinical guidelines for treating high cholesterol levels do not differentiate between men and women.

Middle age risks for men

"Our results suggest that in middle age, [high cholesterol levels](#) are much more detrimental for men than women, so that prevention efforts in this age group will have a greater potential to reduce the occurrence of a first [heart attack](#) in men," said Erik Madssen from the Norwegian University of Science and Technology's (NTNU) Department of Circulation and Medical Imaging, who was first author of the paper with Lars Erik Laugsand, also from NTNU.

The researchers used data from the second Nord-Trøndelag Health Study, a county-wide survey carried out in 1995-1997 in Nord Trøndelag, Norway, that included [blood sample](#) collection from 65,000 people. Because the researchers hypothesised that female sex hormones could possibly protect women with respect to the prevalence of first

heart attacks, they restricted their analysis to participants who were younger than 60 years old at the time of the survey.

More than three times more heart attacks

In the end, the researchers had information from 23,525 women and 20,725 men who fit this category. During the nearly 12 years of follow-up on the participants who were younger than 60 years when the survey was conducted, there were 157 new cases of heart attacks in women and 553 in men.

They also conducted a secondary analysis of participants who were 60 years old or older at the time of the survey, which gave them another 20,138 individuals for the analysis. However, there was no evidence of a negative synergistic effect in male participants in this age group.

"Our findings suggest that middle-aged men with an unfortunate cholesterol profile have a significant additional risk of myocardial infarction than what previously has been thought," Madssen and Laugsand said. "Thus, these men should be treated more aggressively than what often is the case today, so that more infarctions can be prevented and lives can be saved."

More information: Risk of Acute Myocardial Infarction Dyslipidemia More Detrimental for Men than Women, Erik Madssen, Lars Erik Laugsand, Rune Wiseth, Bjørn Mørkedal, Carl Platou, Lars Vatten and Imre Janszky. *Epidemiology*, Volume 24, Number 5, September 2013. DOI: 10.1097/EDE.0b013e31829d2632
journals.lww.com/epidem/Abstract/2013/09/01/Dyslipidemia.3.aspx

Provided by Norwegian University of Science and Technology

Citation: High cholesterol riskier for middle-aged men than women (2013, August 16) retrieved 5 May 2024 from

<https://medicalxpress.com/news/2013-08-high-cholesterol-riskier-middle-aged-men.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.