

Waist size, not body mass index, may be more predictive of coronary artery disease

28 August 2019

For years, women have been told that weight gain could lead to heart disease. A new study indicates that it is the location of the fat that matters most, with abdominal fat representing the greatest harm and not overall body mass index (BMI) when assessing risk for coronary artery disease (CAD). Results are published online today in *Menopause*, the journal of The North American Menopause Society (NAMS).

Because CAD remains the leading cause of death worldwide, there is tremendous attention given to its modifiable risk factors. Estrogen protects women's cardiovascular systems before menopause, which helps explain why the incidence of CAD in [premenopausal women](#) is lower than in men. However, as women's estrogen levels decline during and after menopause, the incidence of CAD in [postmenopausal women](#) outpaces similarly aged men.

Obesity has long been known as a risk factor for CAD because it causes endothelial cell dysfunction, insulin resistance, and coronary atherosclerosis, among other problems. It also is often accompanied by other cardiovascular risk factors, such as hypertension and diabetes. In the past, it has been suggested that overall obesity (which is often defined by BMI) is a primary risk factor. Few studies have attempted to compare the effect of overall obesity versus central obesity, which is typically described by waist circumference and/or waist-to-hip ratio.

The results of this new study of nearly 700 Korean women, however, demonstrated that the presence of obstructive CAD was significantly higher in women with central obesity. No [significant difference](#) was identified based on BMI, indicating that overall obesity was not a risk factor for obstructive CAD. These results are especially relevant for postmenopausal women because menopause causes a change in body fat distribution, especially in the abdominal area.

Findings were published in the article "Association between obesity type and obstructive cardiovascular disease in stable symptomatic postmenopausal women: data from the KoRean wOmen'S chest pain rEgistry (KoROSE).

"The findings of this study are consistent with what we know about the detrimental effects of central obesity. Not all fat is the same, and central obesity is particularly dangerous because it is associated with risk for [heart disease](#), the number one killer of women. Identifying [women](#) with excess [abdominal fat](#), even with a normal BMI, is important so that lifestyle interventions can be implemented," says Dr. Stephanie Faubion, NAMS medical director.

Provided by The North American Menopause Society

APA citation: Waist size, not body mass index, may be more predictive of coronary artery disease (2019, August 28) retrieved 21 April 2021 from <https://medicalxpress.com/news/2019-08-waist-size-body-mass-index.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.