Waist Size, Not Body Mass Index, May Be More Predictive of Coronary Artery Disease

Study investigates association between obesity type and obstructive coronary artery disease in postmenopausal women

CLEVELAND, Ohio (August 28, 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.

For more information about menopause and healthy aging, visit www.menopause.org.
Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.