Greater Muscle Mass May Increase Risk of Hot Flashes

New study suggests that hot flashes are less common in women with sarcopenia and are positively associated with paraspinal muscle mass

CLEVELAND, Ohio (Nov. 10, 2021)—The loss of muscle mass is a natural part of aging. Older women with sarcopenia (age-related loss of muscle mass and function) are at an increased risk of reduced mobility, diminished quality of life, heart disease, and fall-related injuries. However, according to a new study, they are less likely to experience hot flashes. Study results are published online today in *Menopause*, the journal of The North American Menopause Society (NAMS).

The loss of muscle mass and function may be the most dramatic and significant change that occurs during the aging process. Postmenopausal women are at a particularly increased risk of sarcopenia as a result of aging and sex hormone changes after menopause. Other risk factors for sarcopenia that often develop with age include a sedentary lifestyle, reduced protein intake, changes in growth hormone levels, and increased inflammation.

However, unlike the known relationship between sarcopenia and menopause, the association between sarcopenia and various menopause symptoms is somewhat unknown. Vasomotor symptoms (hot flashes) are one of the most common and troublesome menopause symptoms. Hot flashes are associated with several chronic disorders, including obesity, insulin resistance, metabolic syndrome, osteoporosis, and cardiovascular disease.

With regard to obesity, previous hot flash studies have focused on the relationship between body mass index and waist circumference. However, these measures are limited because they do not reflect the exact body composition, such as the percentage of adipose tissue versus muscle tissue. In this new study involving nearly 300 Korean women aged 40 to 65 years, researchers specifically investigated the association between menopause symptoms, including hot flashes, and body composition indices measured by abdominal computed tomography and the prevalence of sarcopenia.

On the basis of the results of this first-of-its-kind study, researchers concluded that hot flashes are less common in women with sarcopenia than in those without and are positively associated with paraspinal muscle mass. Further longitudinal studies should be considered to further define the relationships between hot flashes, skeletal muscle indices, fat and muscle distribution, and sarcopenia, as well as the potential underlying mechanisms.

Study results are published in the article “Association between vasomotor symptoms and sarcopenia assessed by L3 skeletal muscle index among Korean menopausal women.”
“These results highlight the need for additional longitudinal studies to better define the associations of menopause symptoms, such as hot flashes, with body composition and, specifically, with obesity and sarcopenia. This is particularly important given the aging population and the links between sarcopenia in older women and decreased mobility, increased risk of falls and reduced healthspan, and quality of life,” 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.