

News Summary

P1-326: Hormone therapy plus physical activity reduce belly fat, body fat percentage after menopause

Older women who take hormone therapy to relieve menopausal symptoms may get the added benefit of reduced body fat if they are physically active, according to a new study. The results will be presented Wednesday at The Endocrine Society's 91st Annual Meeting in Washington, D.C.

The study provides new information on the health benefits of any type of physical activity, not just exercise, said the presenting author Poli Mara Spritzer, MD, PhD, a professor at the Federal University of Rio Grande do Sul in Porto Alegre, Brazil, and chief of the Gynecological Endocrinology Unit at the university's Hospital de Clinicas de Porto Alegre.

After menopause, a woman's percentage of body fat tends to increase and redistribute to the abdomen, Spritzer said. Excess belly fat is a risk factor for diabetes and heart disease. Postmenopausal women who exercise have a lower percentage of body fat than sedentary women, past research shows. However, Spritzer said less is known about the influence on body fat composition of physical activity in women receiving hormone replacement therapy, or HRT. Some data suggest that estrogen treatment may add to the effect of exercise in reducing fat.

Spritzer and her colleagues studied 34 healthy women who had an average age of 51 years, had experienced menopause for less than 3 years and sought HRT to relieve hot flashes, night sweats and vaginal dryness. They evaluated the women's cholesterol levels, body mass index (BMI), waist circumference (a measure of abdominal fat) and percentage of body fat before and after 4 months of HRT. The women received estrogen plus progesterone therapy in either non-oral (nasal and vaginal) or low-dose oral preparations. For 6 consecutive days before starting HRT and 6 days at the end of HRT, women wore a pedometer to estimate their level of physical activity. The device measured the steps they took, including walking, working, and doing house chores and leisure activities. They were instructed to not change their usual activities. Most of the women did not play sports or do any structured physical exercise, according to Spritzer.

Results showed that 24 of the women were physically active—defined as taking 6,000 steps or more per day—and 10 were inactive (less than 6,000 steps a day). For a woman who has a step, or stride, length of 2 feet (60 cm), 6,000 steps would be around 2.25 miles (3.6 km), Spritzer estimated. For active women, the higher the number of steps they took, the lower was their waist measurement and the better their level of “good” (high-density-lipoprotein, or HDL) cholesterol, the authors reported. The inactive women did not have any changes in body fat or cholesterol. However, when all 34 women were considered in the analysis, body fat still declined significantly after HRT.

“Data from our study suggest that active women could benefit from hormone therapy beyond the relief of menopausal symptoms—by preserving a good body fat percentage and distribution,” Spritzer said. “Further studies with a larger number of subjects are needed in order to answer whether a specific physical activity is better than others.”

The Brazilian National Council for Science and Technology and the Brazilian National Institute of Hormones and Women's Health funded this study.

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