Activity at Midlife Predicts Women's Health Status

BY MARY ANN MOON

Women who are physically active at midlife, including those whose only exercise is walking, are more likely than sedentary women to have exceptionally good health in older age, according to an analysis of more than 2 decades of data from the Nurses' Health Study.

Researchers led by Dr. Qi Sun of the Harvard School of Public Health, Boston, studied how women might reach "successful survival." The team defined that goal as living to at least age 70 with no impairment in cognitive function, no limitations on moderate activities, only moderate limitations on demanding physical activities, no mental health limitations, and no serious diseases.

The researchers wrote that their study "documented a strong, positive association between midlife leisure-time physical activity and the odds of successful survival or exceptional overall health in later life." Even moderate-intensity walking raised the likelihood that women would "maintain physical and cognitive integrity and remain free of major chronic illnesses," the team reported (Arch. Intern. Med. 2010;170:194-201).

Previous studies have not addressed the relationship between activity and healthy aging in women specifically, even though women tend to live longer than men and stand to benefit more from successful survival. "The notion that physical activity can promote successful survival rather than simply extend the lifespan may provide particularly strong motivation for initiating activity," Dr. Sun and his colleagues noted.

The investigators analyzed data on 13,535 women participating in the Nurses' Health Study. The participants were assessed initially in 1976, when they were aged 30-55 years, and have been followed ever since. The type, timing, and intensity of their physical activity were calculated in 1986, when their mean age was 60 years.

At follow-up during 1995-2001, 1,456 (approximately 11%) of these women were found to be successful survivors.

The positive association between physical activity during midlife and successful survival was strong within each group of women categorized by body mass index, indicating that physical activity contributes to optimal health in both lean and overweight women, Dr. Sun and his colleagues said.

Several activities were individually associated with successful survival, including jogging, running, playing tennis, doing aerobics, and walking. Independently of total physical activity levels, walking pace was strongly associated with health in old age. "Compared with women whose walking pace was easy, women with a moderate walking pace had a 90% increase in the odds of successful aging; women whose walking pace was brisk or very brisk had a 2.68-fold increased odds," the researchers said.

In their report, they noted that an estimated 85% of Americans do not engage in any regular vigorous physical activity, but nearly 50% at least walk for exercise. "Given that walking is a sustainable exercise that can often be easily incorporated into people's daily schedules, our observations provide initial support for the consideration of walking in broad public health recommendations," Dr. Sun and his colleagues added.

The study was limited in that the participants were primarily of European ancestry and "largely healthy" at age 60, so the findings may not be applicable to other populations, the researchers said.

The study was supported by grants from NIH and the Boston Obesity Nutrition Research Center. Dr. Sun disclosed a postdoctoral fellowship supported by Unilever Corporate Research. ■

Aerobic Exercise May Cut Menopausal Symptoms

BY SHERRY BOSCHERT

Postmenopausal women improved their physical fitness and reported reductions in the severity of menopausal symptoms after 12-24 weeks of aerobic exercise in three 70-minute sessions per week.

The 65 women (mean age 50.1 years) rated the severity of menopausal symptoms on the self-administered Menopause Rating Scale questionnaire at baseline, 12 weeks, and 24 weeks in the uncontrolled study. The program of aerobic and calisthenic exercise aimed for 75%-80% of maximal heart rate according to the Karvonen method and consisted of 10 minutes of warm-up exercises; 40 minutes of aerobics; 15 minutes of exercise targeting the abdomen, hip, and leg muscles; and 5 minutes for cool-down and stretching.

Participants reported significant decreases in the severity of hot flushes, night sweats, cardiac symptoms, muscle and joint pain, sleeping disorder symptoms, depressive mood, irritability, anxiety, exhaustion, sexual problems, and urinary symptoms between the start and the end of the study, Dr. Selma Karacan of Selcuk University in Konya, Turkey reported.

Some of the symptoms showed improvement by 12 weeks and further significant improvements by 24 weeks, including vasomotor symptoms, muscle and joint pain, psychological symptoms, and sexual problems. The women reported no significant change in vaginal dryness (Sci. Sports 2009 [doi:10.1016/j.scispo.2009.07.004]).

Significant improvements also were seen in resting heart rate, systolic and diastolic blood pressures, flexibility, aerobic power, and the ability to perform sit-ups, push-ups, and right or left hand grips. Body weight, body mass index, body fat percentage, and fat weight decreased significantly, with no change in lean body mass values.

The findings support results from previous observational studies of physically active postmenopausal women compared with age-matched, sedentary control women. No randomized controlled trials have looked at the efficacy of exercise in managing hot flushes.

A decrease due to safety concerns in recent years in the use of hormone replacement therapy to manage the vasomotor symptoms of menopause adds to the importance of finding that evidence-based lifestyle modifications can help menopausal symptoms, Dr. Karacan said. ■

VITALS

Major Finding: Six months of 70-minute aerobic exercise sessions three days per week significantly reduced the severity of menopausal symptoms while improving physical fitness.

Data Source: An uncontrolled study in 65 postmenopausal women.

Disclosures: The investigators reported having no conflicts of interest.

Hormone Therapy Associated With Need for Cataract Surgery

BY SHERRY BOSCHERT

Women who used hormone therapy were more likely to need cataract surgery, a risk potentiated by drinking alcohol, a large Swedish prospective study found.

In a 98-month study of 30,861 postmenopausal women, those who had ever used hormone therapy (HT) had a 14% higher risk for cataract extraction and current HT users had an 18% higher risk, compared with women who never used HT in a multivariate adjusted analysis, Dr. Birgitta Ejdervik Lindblad and her associates reported (Ophthalmology doi:10.1016/j.ophtha.2009.07.046).

Cataract extraction was even more likely in women who were using HT and drank alcohol. Among current HT users, any alcohol consumption was associated with a 29% higher risk for cataract extraction, and those who drank more than one alcoholic drink per day had a 42% higher risk, compared with women who were neither using HT nor drinking alcohol. (One drink was defined as about 13 g of alcohol, roughly equal to one glass of wine, bottle of beer, or drink of liquor.) Drinking alcohol has been associated with increased levels of plasma estrogen in postmenopausal women in prior studies.

Investigators collected data from women in the Swedish Mammography Cohort who completed questionnaires in September 1997 about hormone status, use of hormone therapy, and lifestyle factors. The researchers followed them through October 2005 and compared their names with those on Swedish registers of cataract surgeries, which identified 4,324 women who underwent cataract surgery during the study period.

Among women aged 65 years or older, the risk for cataract surgery was 73% higher in those using hormone therapy, compared with women who never used HT, after the researchers adjusted for the effects of alcohol consumption, smoking, diabetes, hypertension, steroid or vitamin use, body mass index, and education level.

Longer use of HT was associated with higher risk for cataract extraction in a linear fashion, added Dr. Lindblad of the Karolinska Institute, Stockholm. Current users of hormone therapy reported longer duration of HT (a mean of 6 years) compared with past users (4 years). Women who used HT for more than 10 years had a 20% higher risk of cataract extraction, compared with women who never used HT.

If the findings can be confirmed, the increased risk for cataract extraction should be added to the list of increased risks for breast cancer and cardiovascular disease that are associated with HT use, the investigators said.

Dr. Lindblad and associates advised caution in comparing their study with those conducted outside of Sweden because HT preparations vary between countries. Hormone therapy with estrogen alone is more common in the United States.

And U.S. versions of HT for postmenopausal symptoms like hot flushes most commonly use conjugated estrogens alone or in combination with progesterone-like progestins, while in Sweden the predominant hormone therapy is a combination of estradiol with testosterone-like progestins.

At the start of the study, 39% of women were using hormone therapy, 11% had used HT in the past, and 50% had never used HT. Half of current users took HT to relieve hot flushes, 33% used it for urogenital symptoms, and 17% took HT for both.

The risk for cataract extraction in women using HT did not differ significantly based on current or past smoking.

The investigators reported having no conflicts of interest related to the study, which was funded by Swedish government agencies and research foundations. ■