

# Clinical Update

## Estrogen May Lower Younger Women's Heart Risk

Findings differ from prior HRT study involving those over 60

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Women in their 50s who take estrogen therapy have lower levels of dangerous calcium deposits in their arteries, suggesting they're at reduced heart disease risk, researchers say.

The study results should reassure younger women who use supplemental estrogen to lessen their menopausal symptoms, but it shouldn't be seen as a license to use hormone-replacement therapy to prevent heart disease, experts said.

The findings should "provide reassurance to younger women who are wrestling with the decision, that hormones are unlikely to have an adverse effect on the heart and may even slow the early stages of plaque build-up," said lead researcher Dr. JoAnn Manson, chief of preventive medicine at Brigham and Women's Hospital and professor of medicine at Harvard Medical School, both in Boston.

However, "the study should not be interpreted to mean that women should take estrogen to prevent cardiovascular disease. There are other risks to hormones, including the risk of blood clots in the legs," noted Manson, who is also co-author of *Hot Flashes, Hormones and Your Health*.

The study, published in the June 21 *New England Journal of Medicine*, "becomes very important but not for prevention and not for treatment [of heart disease], but to alleviate the fears of people in the context of developing heart disease if they are taking HRT," added Dr. Suzanne Steinbaum, director of women and heart disease at Lenox Hill Hospital in New York City. "Women aged 50 to 59 who are having [menopausal] symptoms can really say, 'I can take HRT without getting heart disease.' "

Statements from numerous organizations echoed those sentiments.

"The results... are very encouraging," said a prepared statement from the International Menopause Society. The group also noted that the CT scans used in the trial were performed at a mean age of just under 65 years of age. That "suggests a new 'safety margin' for age and duration of estrogen therapy, as women can be reassured that estrogen therapy is cardioprotective at least until age 65," the society said.

The findings "provide additional reassurance to women in their fifties that there is little risk in beginning estrogen therapy to treat menopausal symptoms such as hot flashes, night sweats, and discomfort with intercourse," Dr. Robert W. Rebar, executive director of the American Society for Reproductive Medicine, said in a prepared statement. "In fact, estrogen may actually protect against development of heart disease."

The new study is based on data from the landmark Women's Health Initiative (WHI) trial. It is the first randomized trial to examine the relationship between estrogen therapy and coronary artery calcium in this age group.

The original WHI was halted when researchers found an increased risk of adverse events which, depending on whether the woman was taking estrogen alone or estrogen plus progestin, included heart attack, stroke, breast cancer and blood clots. Manson was one of the principal investigators on the WHI trial.

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"That study enrolled women aged about 50 to 79. Many had been postmenopausal for decades and some had never had symptoms such as hot flashes and sleepless nights. Collectively, it was bad news," said Farida Sohrabji, associate professor of neuroscience and experimental therapeutics at Texas A&M Health Science Center College of Medicine.

When older and younger women in the study were looked at together, "women who took hormones had a higher incidence of cardiovascular disease," Sohrabji said. "But if you looked very carefully even at that old data, in the youngest group -- 50 to 59 -- there was a hint that it wasn't really bad for the heart."

The new trial focused on younger women -- specifically, 1,064 women aged 50 to 59 who had undergone a hysterectomy and who were randomly selected to receive either estrogen or a placebo. The treatment lasted a mean of 7.4 years and there was an additional follow-up of 1.3 years.

Women receiving estrogen were 30 percent to 40 percent less likely to have severe coronary artery calcium than women on the placebo, Manson's team found.

Women who had at least 80 percent adherence to the medication had a 60 percent lower risk of severe coronary calcium, as well.

"The data are very convincing. They show that the women who took estrogen replacement therapy clearly have much smaller plaque than women who took a placebo," Sohrabji said. "But early postmenopausal and late postmenopausal women need to be treated as different groups. That's really critical."

And the use of hormones does need to be restricted to the relief of menopausal symptoms, not as a means of staving off heart disease, she added.

"It is showing that women who do take [estrogen] have a decreased incidence of heart disease," Steinbaum said. "Maybe at some point down the line we might say it's OK for [heart disease] prevention but right now they can't say that. Don't take [hormones] for prevention."

