

IN EVERY ISSUE

Can an Aspirin a Day Keep Breast Cancer Away?

BY CHARLOTTE HUFF

Breast cancer survivors who regularly take aspirin to protect their hearts may enjoy another payoff: a lower risk of recurrence.

Regular aspirin use was associated with about half the risk of dying, with similar results for the risk of distant breast cancer recurrence, according to findings published earlier this year in the *Journal of Clinical Oncology*. The observational study was based on self-reports of aspirin use in nearly 4,200 female nurses who had completed treatment for breast cancer.

But women shouldn't rush to their drugstore to stock up on the anti-inflammatory medication, says oncologist Wendy Chen, MD, a study co-author and assistant professor of medicine at Harvard Medical School. The study doesn't show cause and effect, she cautions. Plus, aspirin can cause stomach bleeding in some people, a risk that increases with age.

"However, we do believe this is compelling enough evidence to really explore this as prevention for breast cancer recurrence," Chen says, adding that "for those women who are already taking aspirin for heart disease prevention, they may be getting some additional benefit from it."

The researchers at Harvard-affiliated Brigham and Women's Hospital, who led the study, are hoping to obtain federal funding for a multi-center research trial that would follow hundreds of breast cancer survivors for at least five years, Chen says. The study would be randomized so aspirin use could be measured against a placebo.

If aspirin proves to play a preventive role, there are a number of potential mechanisms that could be involved, including estrogen levels or inflammatory properties, Chen says. But, she adds: "These are all speculation."

Regular aspirin use has been studied as a preventive measure in other cancers. To date, research most clearly supports a protective effect in colorectal cancer prevention, where the evidence is "relatively strong," says Eric Jacobs, PhD, strategic director of pharmacoepidemiology at the American Cancer Society. Several randomized trials have determined that aspirin use reduced the formation of precancerous polyps in individuals who previously had developed a polyp, he says.

However, at this point, the ACS doesn't recommend aspirin as a preventive measure for any malignancy, he says. For colorectal cancer, the risk of severe

stomach bleeding can outweigh potential benefits, Jacobs says. People at very high risk, such as those with familial adenomatous polyposis, may wish to discuss use of aspirin or other anti-inflammatory medications with their physician, he says.

The results in the *JCO* study were based on self-reported aspirin use among 4,164 nurses, ages 30 to 55, involved with the Nurses' Health Study. They were diagnosed with stage 1, 2, or 3 breast cancer between 1976 and 2002. After adjusting for treatment, smoking status, and other factors, researchers found a statistically significant lower incidence of both death and breast cancer recurrence.

Even so, Chen says, the women were choosing to take aspirin. "There may be something different about women who choose to take aspirin regularly," she says. For example, they may be healthier to begin with, she says.

The reduction in breast cancer recurrence and death didn't appear in women taking aspirin just once a week. Rather, they had to be taking the anti-inflammatory two to seven days a week.

It's unknown what aspirin dose the women were taking, Chen says. Some of the nurses were likely taking a "baby" dose, since that's the recommended dose for heart disease prevention, she says. (The American Heart Association recommends low-dose aspirin for heart attack or stroke survivors, if their doctors decide the potential benefit outweighs the risk.)

At this research juncture, though, it wouldn't hurt for breast cancer survivors to revisit the possibility of aspirin, Chen says. Their doctors can weigh the potential issues involved, not just in terms of the woman's heart disease risk but also her vulnerability to stomach bleeding.

"For some people, I think the benefits of aspirin are underappreciated," she says. "For some people, the risks are underappreciated. It works both ways."