Aspirin May Boost Survival After Breast Cancer

BY DOUG BRUNK

Aspirin use after the diagnosis of stage I-III breast cancer was associated with a decreased risk of breast cancer death and distant recurrence, results from the ongoing Nurses' Health Study showed.

The study is believed to be the first to show a survival advantage among women with breast cancer who take aspirin.

"If confirmed, our results may broaden the scope of interventions available to reduce breast cancer–related death and mortality," reported researchers led by Dr. Michelle D. Holmes of Harvard Medical School and Harvard School of Public Health, Boston.

They emphasized that the results "may be generalizable only to longer term breast cancer survivors," described as those who have lived long enough after diagnosis to report aspirin use after diagnosis (about 4 years).

The researchers used questionnaire data to evaluate aspirin use among 4,164 female registered nurses in the Nurses' Health Study who were diagnosed with stage I, II, or III breast cancer between 1976 and 2002, and who were observed until they died or until June 2006, whichever came first (J. Clin. Oncol. 2010 Feb. 16 [doi:10.1200/JCO.2009.22.7918]). The primary outcome measured was breast cancer mortality risk according to the number of days per week of aspirin use, categorized as 0, 1, 2-5, or 6-7 days.

Dr. Holmes and her associates reported that 314 deaths attributed to breast cancer and 400 distant recurrences occurred during the study period. Compared with women who never used aspirin, the multivariate adjusted relative risk of breast cancer death was 1.07 among those who used aspirin 1 day per week, 0.29 for those who used aspirin 2-5 days per week, and 0.36 for those who used aspirin 6-7 days per week.

"Results did not differ appreciably when stratified by stage, [body mass index], menopausal status, or [estrogen receptor] status," the researchers noted.

Aspirin use had a similar impact on distant recurrence of cancer. Compared with women who never used aspirin, the multivariate adjusted relative risk of distant recurrence was 0.91 among those who used aspirin 1 day per week, 0.40 for those who used aspirin 2-5 days per week, and 0.57 for those who used aspirin 6-7 days per week.

"We speculate that the association was stronger with breast cancer death than with recurrence because recurrence is more likely to be misclassified than death," the researchers stated.

Dr. Lori Pierce, a member of the American Society of Clinical Oncology's Cancer Communications Committee, pointed out that although results from several studies suggest that aspirin may have beneficial effects against cancer because of its anti-inflammatory effects, "aspirin can cause stomach bleeding and is not for everyone. These are promising findings, and if they are confirmed in additional clinical trials, physicians may be able to regularly recommend aspirin to their breast cancer patients to reduce risk of cancer spread and mortality."

Dr. Holmes and her associates acknowledged certain limitations of the study, including the fact that information on aspirin intake and distant recurrence was self-reported and that the study did not collect data on aspirin dosage. ■

VITALS

Major Finding: Aspirin use after the diagnosis of stage I-III breast cancer was associated with a multivariate adjusted relative risk of breast cancer death of 1.07 in those who used aspirin 1 day per week, 0.29 in those who used aspirin 2-5 days per week, and 0.36 in those who used aspirin 6-7 days per week.

Data Source: Responses from 4,164 female RNs in the Nurses' Health Study, diagnosed with stage I-III breast cancer between 1976 and 2002. The women were observed until June 2006 or until they died, whichever came first.

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