

# Guidelines Stir Debate About Early Mammography

BY MICHELE G. SULLIVAN

FROM THE ANNUAL MEETING OF  
THE AMERICAN SOCIETY OF  
BREAST SURGEONS

WASHINGTON – Younger women may suffer under new national mammography screening guidelines that recommend that the procedure become biennial and begin at age 50 years, according to investigators who conducted a retrospective study of breast cancer patients in the 40- to 49-year age group.

Breast tumors that arise in this group may not be discovered until they present clinically, at which time treatment will be more expensive and curative therapy perhaps impossible, Dr. Paul Dale said.

“Our study found that tumors identified through mammography generally had better outcomes after treatment [than did] those found through clinical exam,” he said at a press briefing.

The 10-year retrospective study found that women aged 40-49 years who presented with a breast cancer through clinical symptoms or palpation had significantly larger tumor size, more nodal involvement, and lower 5-year survival rates than did a similarly aged group whose cancers were detected through mammography.

The study comprised 311 women aged 40-49 years who were treated for breast cancer at a single center in 2004-2008. Of these, 145 (47%) had undergone a screening mammography that detected the tumor, whereas 166 (53%) had a tumor that presented clinically, either by symptoms or by physician- or self-exam of the breast. Tumors in the mammography group were significantly smaller than those among the clinically presenting group (median, 2 cm vs. 3 cm). The 5-year disease-free survival rate was significantly better in the mammographically detected group (94% vs. 71%); their 5-year overall survival was also sig-

## VITALS

**Major Finding:** The 5-year disease-free survival rate was significantly better when breast tumors were detected by mammography (94% vs. 71% when tumors presented clinically), as was 5-year overall survival (97% vs. 78%).

**Data Source:** A 10-year retrospective study of 311 women aged 40-49 years who were treated for breast cancer.

**Disclosures:** Dr. Dale said he had no relevant financial disclosures.

nificantly greater (97% vs. 78%). These advantages occurred despite the fact that significantly more women in the mammographically detected group had a family history of breast cancer (25% vs. 15%).

A multivariate analysis found that mammographic cancer detection, node negativity, and smaller tumor size were all significantly associated with an increase overall survival.

“In our institution, we find that 20% of the women diagnosed with breast cancer are younger than age 50,” said Dr. Dale, chief of surgical oncology at the University of Missouri-Columbia. Both the findings of this study and his own clinical experience have convinced him that annual mammographic screening has “great value” to this younger set of women, despite the 2010 U.S. Preventive Services Task Force (USPSTF) recommendation that biennial screening mammograms begin at age 50.

The agency recommended this screening regimen for women aged 50-75 years, but said that for women aged 40-49 years the benefit of screening is small and is balanced by “moderate harms,” including false positives that lead to unnecessary invasive interventions, anxiety, and the small impact of pain from biopsy and radiation exposure. The statement was largely informed by a 2009 review of the SEER (Surveillance Epidemiology and End Results)

database. That review concluded that among women aged 40-49, the number needed to treat to prevent one breast cancer death was 1,904, compared with 1,339 for women aged 50-59.

“Although the relative risk reduction is nearly identical (15% and 14%) for these two age groups, the risk for breast cancer increases steeply with age starting at age 40 years,” the document stated. “Thus, the absolute risk reduction from screening ... is greater for women aged 50-59 years than for those aged 40-49 years.”

However, the USPSTF document did not recommend against earlier screening, saying that the decision should be based on a woman’s family history of the disease and her individual desires, and only after



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DR. DALE

a discussion about the relative risks and benefits.

In an interview, Dr. Dale debated this approach, saying that “when it’s your cancer, it matters a lot. I have been doing this for 20 years, and of all the women I have put through a breast biopsy because of something suspicious identified on a screening mammogram, I can tell you that 100% of those with a negative result were glad they did it. The woman’s level of comfort in hearing that is huge,” he added.

A 2011 study supports the idea that screening more women will save more lives, Dr. Dale said, referring to another

analysis of the same SEER data. Dr. Edward Hendrick of the University of Colorado at Denver and colleagues, concluded that annual screening for women aged 40-84 years would result in a 71% greater mortality reduction than the USPSTF recommendation of biennial screening in those aged 50-74 years. An annual screening for women aged 40-84 years would save almost 100,000 more lives, the authors argued (AJR 2011;196:W112-6).

Dr. Dale also suggested that resource allocation and federal funding concerns may have at least partially motivated the government study. “The government is paying the brunt of this, and annual screening runs into the billions,” he said. “But if you really look at the economics of it, and the years of life it can save – the fact that these women are not undergoing the much more expensive therapies [of treating more advanced cancer], and the economic benefit their productive lives give our economy – the economic picture doesn’t look that bad.”

Another 2011 study supports this conclusion, he said. Dr. Blake Cady of the Cambridge (Mass.) Breast Center and associates suggested that financial resources were a driving point of the recommendations. The annual cost of an additional 25,000 mammograms could well be offset by an estimated \$50,000-\$100,000 per life saved, they said. “Why the USPSTF deliberately chose a less effective method of preventing mortality in the most frequent and feared cancer of women is a puzzle, especially as cost considerations may not be a major adverse factor, although resource allocation is increased,” they concluded (Ann. Surg. Oncol. 2011;18:903-6).

The American Cancer Society, American College of Surgeons, and American College of Obstetricians and Gynecologists still recommend either annual or biennial screening for women, beginning at age 40. ■

## Smoking Raises Risk of Certain Cancers in Women

BY JENNIE SMITH

FROM THE AMERICAN SOCIETY  
OF CLINICAL ONCOLOGY

Women who smoke for 35 years or more have a 59% higher risk of developing breast cancer, compared with those who never smoked, while those who smoked for 15-35 years had a 34% higher risk, according to data from the National Surgical Adjuvant Breast and Bowel Project Breast Cancer Prevention Trial, a 5-year randomized placebo-controlled trial of tamoxifen in 13,388 healthy women at high risk of breast cancer because of family history or other factors. The data also show that smoking cigarettes is especially dangerous for this group of women.

The study, led by Stephanie Land, Ph.D., of the University of

Pittsburgh also looked at the incidence of invasive endometrial, lung, and colon cancers among its subjects, who were followed a median of 8.7 years. The investigators also looked at the effect of self-reported alcohol use and exercise habits on the risk of all four types of cancer.

In an abstract released in advance of the society’s meeting in Chicago, Dr. Land and her colleagues reported that colon cancer incidence was also four times higher among women who reported having smoked more than 35 years than for never smokers, and 7% higher for women who smoked for 15-35 years.

“An increase in breast cancer risk associated with cigarette smoking had not been established until recently,” Dr. Land

said at a press conference announcing the findings, and noted that her group’s study reported larger effects than had previously been seen.

While the findings show that smoking is even more dangerous for women at known risk of breast cancer, the good news is that “healthy lifestyle choices provide women a way to reduce their risk of these four major cancers,” Dr. Land said.

Not surprisingly, longtime smokers saw a significantly higher risk of lung cancer in the study. Women who smoked a pack of cigarettes per day for more than 35 years had a risk 30 times higher than did women who never smoked. Women who smoked less than one pack per day for more than 35 years had a 13-fold increase in lung cancer risk.

They also found a significant association between low levels of physical activity and a 72% increased risk of endometrial cancer, which they hypothesized might be related to obesity, a known risk factor for endometrial cancer.

Alcohol consumption, however, was not associated with increased cancer risk, a finding that differs from previous studies. Moderate alcohol consumption of up to one drink a day was associated with a 65% decreased risk of colon cancer, compared with those women who did not drink. More than one drink per day was not associated with increased risk. The investigators said several factors might have been different in this study from past studies, particularly that it enrolled fewer heavy drinkers

(13.3% of subjects reported that they drank one or more drinks per day), compared with other studies.

In a press conference announcing these and other findings, Dr. George W. Sledge Jr., ASCO’s president and the Ballve-Lantero Professor of Oncology at Indiana University, Indianapolis, said Dr. Land’s study highlighted “the incredible importance of lifestyle factors,” and offered a reminder of the need to “think less about drugs and a great deal about whether we can prevent cancer.”

The study was funded by the National Cancer Institute. One of Dr. Land’s coauthors, Dr. Donald Lawrence Wickerham, disclosed having consultant or advisory roles with Lilly and honoraria from AstraZeneca. ■