# Mammography Cut Breast Ca Mortality 10%

BY HEIDI SPLETE

FROM THE NEW ENGLAND JOURNAL OF MEDICINE

The availability of screening mammography accounted for a 10% relative reduction in deaths from breast cancer from 1996 through 2005, based on data from more than 40,000 women with breast cancer.

"The use of screening mammography is still debated, chiefly because of concern regarding methodologic limitations in some randomized trials," Dr. Mette Kalager of the Cancer Registry of Norway, Oslo, and the Harvard School of Public Health in Boston, and colleagues reported.

Norway implemented a nationwide breast cancer screening program in 1996. To avoid some of the limitations of previous studies, the researchers divided 40,075 women with breast cancer into four groups: those in counties of Norway with and without breast cancer screening programs between 1996 and 2005, and two historical comparison groups of women living in these same areas between 1986 and 1995. The researchers obtained information on breast cancer as the cause of death through links between the Cancer Registry of Norway and the Cause of Death Registry at Statistics Norway (N. Engl. J. Med. 2010;363:1203-10).

Women who were aged 50-69 years beginning in 1996 were eligible for screening mammography. The maximum follow-up time was 8.9 years. Overall, 4,791 (12%) of the women with a breast cancer diagnosis died, and 423 of these women (9%) were diagnosed after the introduction of the screening program.

The death rate in the screened group of women aged 50-69 years was 18 per 100,000 person-years, vs. 25 per 100,000 person-years in their historical counterparts. The rate of death in the unscreened group was 21 per 100,000 person-years, compared with 26 per 100,000 person-years in their historical counterparts.

These numbers translate to a 28% drop in breast cancer mortality in the screened group and an 18% drop in the unscreened group, compared with their historical counterparts, suggesting a 10% relative reduction in mortality from breast cancer screening alone. Part of the reduction was "presumably a result of increased breast cancer awareness, improved therapy, and more sensitive diagnostic tools," they said.

When mortality rates were broken down by stage, women in the screened group with stage I tumors had a 16% relative reduction in mortality, compared with their historical counterparts. Women in the unscreened group had a 13% relative reduction in mortality, compared with their historical counterparts.

Women in the screened group with stage II tumors had a 29% reduction in mortality, compared with their historical counterparts. The reduction in mortality in the unscreened group was 7%. Women with stage III or IV tumors showed equally reduced mortality from cancer in both the screened and unscreened groups (rate ratio for death in both groups, 0.70), compared with their historical counterparts.

Women who were younger than 50 years or older than 69 years and therefore not eligible for screening during the study period also showed fewer deaths from breast cancer per 100,000 person-years, compared with their historical counterparts. Women in these age groups likely benefited from the presence of multidisciplinary cancer care teams, although they were not screened for breast cancer, the researchers noted.

However, "the reduction in breast cancer mortality among women [aged 70-84] was largely the same as that in the screening group," they added.

The Cancer Registry of Norway and the Research Council of Norway funded the study. Dr. Kalager and associates had no financial conflicts to disclose. ■

VIEW ON THE NEWS

## The Impact of Screening Mammography Has Declined

Dr. H. Gilbert Welch noted that the 10% reduction in death rates in the study by Dr. Kalager and colleagues is below the 15%-23% reduction estimated by the U.S. Preventive Services Task Force in a study published in 2009 (Ann. Intern. Med. 2009;151:738-42).

Dr. Welch commented that, based on the historical comparisons used in the study, "it is quite plausible that screening mammography was more effective in the past than it is now."

He suggested that increased awareness of breast cancer and of the need to seek care for overt breast abnormalities have made screening less of a factor in reducing breast cancer deaths.

He also emphasized that the reduction in mortality in this study appeared to be due to a combination of both screening and the multidisciplinary teams that provided better breast cancer treatment.

Indeed, the study provides data that the treatment may be most important, since women over age 70 years who were not offered screening mammography had an 8% reduction in breast cancer mortality.

"Thus, the relative reduction in mortality due to screening mammography alone could be as low as 2%," he said.

Dr. Welch also raised the issue of the false alarm.

"Up to 1,000 women will have at least one 'false alarm,' about half of whom will undergo biopsy."

He added that screening mammography has become a measure of health care performance, but "the time has come for it to stop being used as an indicator of the quality of our health care system."

Instead, the study findings by Dr. Kalager and colleagues "help confirm that the decision to undergo screening mammography is, in fact, a close call."

H. GILBERT WELCH, M.D., M.P.H., *is a professor of medicine and community and family medicine at the Dartmouth Institute for Health Policy & Clinical Practice in Lebanon, N.H. Dr. Welch made his comments in an editorial accompanying the study (N. Engl. J. Med. 2010;363:1276-8). He had no relevant financial disclosures.*

## Ten-Year Breast Cancer Survival Has Significantly Improved Since 1940s

FROM A PRESS BRIEFING SPONSORED BY THE AMERICAN SOCIETY OF CLINICAL ONCOLOGY

One in four women diagnosed with breast cancer in the 1940s was alive 10 years later, compared with three of four women diagnosed in recent years, based on data gathered at a single institution.

Overall, the 10-year survival rate for all types of breast cancer improved significantly over 60 years, from 25% between 1944 and 1954, to 77% between 1995 and 2004. The improvement stems from earlier disease detection and a multimodal approach to treatment at different stages, said Dr. Aman Buzdar, the study's lead author.

The study's goal was to quantify the steady improvements in breast cancer survival rates over the past 6 decades in patients at the MD Anderson Cancer Center in Houston. The survival rates seen at MD Anderson are generalizable to the rates at smaller regional hospitals and community cancer centers, Dr. Buzdar said.

"If patients are appropriately managed, they have a much better chance of surviving breast cancer today than they would have had 30 or 20 or even 10 years ago, because the therapies are constantly evolving and improving," Dr. Buzdar, professor of medicine and breast medical oncology at the center, said in a written statement. If the approaches used at MD Anderson are applied in the community, similar outcomes can be achieved, he said at the press briefing.

Dr. Buzdar and colleagues reviewed the center's database of approximately 57,000 breast cancer patients seen between 1944 and 2004. The review included 12,809 patients who had their diagnoses established and treatments initiated at MD Anderson.

Ten-year survival rates improved significantly from the 1944-1954 period to the 1995-2004 period: For local breast cancer, the rates rose from 55% to 86% and for regional breast cancer they increased from 16% to 76%. The survival rate for metastatic disease improved from 3% to 22%.

Dr. Buzdar said he had no conflicts.

**–Heidi Splete**

## *Incontinence, Prolapse Surgeries Set To Increase Substantially by 2050*

FROM THE ANNUAL MEETING OF THE AMERICAN UROGYNECOLOGIC SOCIETY

LONG BEACH, CALIF. – If present trends continue, U.S. surgeons will be performing 179,000 more incontinence and prolapse surgeries annually in 2050 than they are today.

The projected increase results primarily from an aging population, Dr. Jennifer Wu said at the meeting.

Stress incontinence surgeries are predicted to increase from about 211,000 in 2010 to 310,000 in 2050, and surgeries for pelvic floor prolapse are predicted to increase from 166,000 this year to 246,000 in 2050.

Dr. Wu of Duke University, Durham, N.C., and her colleagues used three sources of data in making their forecast. The U.S. Census Bureau provided estimates of the female population in various age groups between 2006 and 2050. Data on the number of women undergoing these surgeries, broken down by age group, came from the Nationwide Inpatient Sample of 2007 and the National Survey of Ambulatory Surgery of 2006.

The largest number of surgeries were in women aged 40-59 years. During the survey years, 48,050 women in that age group had inpatient surgery, and 53,790 had outpatient surgery for incontinence. Similarly, 49,490 women had inpatient surgery and 20,700 had outpatient surgery for prolapse.

"One out of 10 women will undergo surgery for incontinence or prolapse in her lifetime," Dr. Wu said. The estimates would provide health officials and policy makers with important information about the future disease burden and economic impact of these procedures.

Dr. Wu stated that she had no relevant financial disclosures.

**–Robert Finn**

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