

Yearly Mammograms Starting at Age 40 Cut Mastectomy Risk in Half

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Annual mammograms beginning at 40 years of age would greatly reduce the risk for mastectomy in women between 40 and 50 years, according to a study presented by British researchers here at the Radiological Society of North America 96th Scientific Assembly and Annual Meeting.

One of the aims of the researchers was to appeal to healthcare policy setters by drawing attention to the number of breasts saved compared with the number of lives saved when annual mammography begins at age 40.

Current guidelines in the United Kingdom stipulate that screening for breast cancer begin at 50 years of age. This policy means that twice as many women in the 40- to 50-year age group will lose their breast when a cancer is found — which is usually after a woman discovers it herself — than if the screening is done annually, as recommended by the American Cancer Society, said **Nicholas (Nick) Perry, MD, director of the London Breast Institute in the United Kingdom** [Dr Perry has been lead Radiologist and Director of the Princess Grace Breast Unit since 2000, when it became the first unit in the UK to use Digital Mammography], in an interview with *Medscape Medical News*.

"It is very important to screen women in this age group," Dr. Perry said. "It's true that breast cancer incidence is more common in older women, but when breast cancer occurs in younger women, it is more aggressive. These women have the most to lose from breast cancer at an early age, and the most to gain from annual screening."

About 40% of all life-years lost to breast cancer are in women 35 to 49 years of age who are diagnosed outside of screening. Breast cancer is the single most common cause of death in women between 35 and 54 years of age. Women who are not being screened have the most to gain from early detection because they've got more life-years ahead of them to lose, Dr. Perry explained.

In the study, Dr. Perry and his colleagues looked at data on 184 women 40 to 50 years of age from their center who were diagnosed with breast cancer.

They found that the majority — 74% — had never had a mammogram, and that just 26% had previously had a mammogram — 18 women in the previous year and 30 some time in the past.

The mastectomy rate in the women who were screened in the previous year, as in the general population in the United States, was 22%. The rate in the women who had had a mastectomy at some point in the past was 47%; if they had never had a mammogram, it was 53%.

The average size of the tumor with previous-year mammography was 17.8 mm; with mammography more than a year previous, it was 24 mm; and with no mammography, it was 29 mm.

The percentage of women with multifocal disease, which is usually an indication for mastectomy, was 12% with previous-year mammography, 22% with mammography more than a year previous, and 36% with no mammography.

The rate of high-grade tumors was 31% with previous-year mammography; 32% with mammography more than a year previous, and 46% with no mammography.

"I think the message here is a pretty strong one. It supports the value of mammography and it supports the recommendation of the American Cancer Society," Dr. Perry said.

He is hoping that the National Health Service — the system that governs how healthcare is dispensed in the United Kingdom — will heed the results of his study, but he is not overly optimistic.

"The National Health Service line is very much about what is cost-effective for the government as opposed to what is most desirable for individual women," he said. "This really is the difficulty."

Dr. Perry said he wanted to draw attention, not to the mortality benefit of breast cancer screening, but to the fact that such screening saves women from having mastectomies.

"Of course there is an implication for saving lives as well, because obviously if you've got a smaller tumor, you've got a lower chance of multifocality, and you've got a lower grade of tumor, then your survival is going to be better. I've left that out as an implication and just focused on the mastectomy angle," he said. "I was a little surprised myself when I saw the difference in the percentage. I didn't expect it to be that great."

Commenting on this study for *Medscape Medical News*, **Robert A. Smith, PhD, director of cancer screening** at the **American Cancer Society**, said that the Society does recommend annual mammography at age 40 and that these screenings are covered by the Affordable Care Act, so that all women, regardless of ability to pay, have equal access.

"At this age, breast cancer rates start to rise, and death from breast cancer diagnosed between the ages of 40 to 49 accounts for a significant fraction of deaths that occur from breast cancer each year. Mammography has been shown not only to reduce breast cancer deaths among women diagnosed with breast cancer in this age group, but early detection also is associated with less aggressive cancer, as shown by Dr. Perry."

Dr. Smith added that the recent debates about mammography in this age group have placed a good deal of emphasis on the benefits and harms, especially in regard to the value of mammography in reducing the risk of dying from breast cancer compared with the harm associated with false positives.

"Among the benefits that have received very little attention is the contribution of early detection in reducing the need for mastectomy and chemotherapy," Dr. Smith noted. "Compared with treatment regimens in the past, early detection with mammography has made breast-conserving therapy an option for many women."