

Ask the Doctor: November 2016

Recent Headlines: *Screening mammograms do more harm than good!*

There has been a recent assault on the value of mammographic screening. The attack is based on flawed data, but the media has bought into this concept hook, line and sinker. Headlines that say mammograms don't work are attention grabbers, and apparently, arguments to the contrary are not.

If the public fails to take this issue seriously, it is inevitable that the government will give insurance companies an excuse to stop paying for mammograms for women in their 40's, to pay every other year starting at age 50 and to stop paying at age 74. If enacted, the current trend of progressive improvements in breast cancer survival will be reversed, and many women will die needlessly from breast cancer.

What you can do to fight back?

Learn more about the mammography controversy: who is behind it, why it is important to your future, what you can do to stop it.

Read the response to the recent L.A. Times article that breast cancers are being over-diagnosed by screening mammograms:

Over-diagnosing Over-diagnosis

A recent article in the L.A. Times by Melissa Healy casts doubt on the value of screening mammography. Her article is based on publications by Dr. Gilbert Welch, who has been a long-time critic of mammographic screening.

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Dr. Welch's premise for concluding that mammograms led to unnecessary treatments is based on his observation that screening leads to the detection of a large number of small breast cancers without a corresponding reduction in the number of advanced breast cancers. His assumption is that many of these small cancers would not progress and cause harm.

The logic behind these assumptions is open to question, because advanced cancers typically are found in underserved populations that have low levels of participation in screening programs. In populations with high levels of screening, locally advanced cancers are uncommon (1).

Dr. Welch bases his conclusions on a study comparing breast cancer outcomes during two time periods. First was 1977-1979 before screening was routine, and the second was 2000-2002 when screening was widespread. His data source is the SEER program (Surveillance, Epidemiology and End Results), which provides information on the size and stage of breast cancers at the time of diagnosis.

What is critically lacking in the SEER data is information on mammographic screening for individual patients. The fundamental flaw in the study reported by Dr. Welch is that he had no idea which patients received a mammogram and which did not. This lack of screening data undermines the credibility of his conclusions.

Studies that have data on who was screened and who was not come to a much different conclusions. One recent study from Canada evaluated a large group of women who participated in routine screening and found a 40% reduction in breast cancer mortality (1). A recent autopsy study from Boston found that 65% of women who died of metastatic breast cancer never had a mammogram (2).

It has also been observed that when screening is introduced into underserved populations, the percentage of advanced cancers drops and there is a corresponding rise in the number of early stage cancers (3). This is a critical observation since survival with early detection is greater than 95% and survival with advanced cancer is in the range of 50-60%.

Dr. Welch also states that the biggest harm from screening is over-diagnosis. In other words, he asserts that screening leads to the detection of small cancers, that if left untreated, would not cause harm.

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It is correct to point out that some small, low-grade cancers may take years before becoming life threatening. Thus, older women who have a cancer that is only seen on the mammogram might “outlive” their cancer even without treatment. Small but rapidly growing cancers in the elderly may benefit from aggressive treatment. Treating physicians must adjust their treatments based on tumor biology.

For younger women, over-diagnosis is a non-issue. Given time, small, non-aggressive cancers will progress. Most will spread beyond the breast within a decade or less. Once this spread has taken place, there is often the need for aggressive surgery and chemotherapy, and the chances for survival are markedly reduced.

The irony of the case against mammographic screening is that it comes at a time when major progress is being made in early detection. We now have technology, such as screening ultrasounds and screening MRIs, that can detect cancers not visible on mammograms. Widespread adoption of advanced screening technology, particularly in high-risk women and women with dense breasts, has the potential to produce dramatic reductions in breast cancer mortality.

Now is not the time to cut back on screening. Now is the time to develop less expensive and more effective screening technology. We must recognize that over-diagnosis is not the problem. The problem is over-treatment. Our goal must be to individualize patient care in a manner that maximizes benefits while avoiding the harm associated with over-treatment.

Reference:

1. Coldman A., Phillips N., Wilson C. et. al. "Pan-Canadian Study of Mammography Screening and Mortality From Breast Cancer," *Natl Cancer Inst* 106 (July 2014):1-7.
2. Webb M.L., Cady B., Michaelson J.S. et. al. "A Failure Analysis of Invasive Breast Cancer: Most Deaths From Disease Occur in Women Not Regularly Screened," *Cancer* 120 (Sept. 2014): 2839-2846.
3. Epidemiologic Study from Orange Co. California: Making mammographic screening available to the underserved Hispanic population.

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