



Medical Myths: Mammography

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MYTH #1: A monthly breast exam is the best way to find breast cancer.

In fact, screening mammography is the best way to detect breast cancer when it is small and curable.

MYTH #2: Mammography alone is enough.

Mammography alone can detect up to approximately 40 percent of breast cancers when they are small and curable. However, when combined with monthly self-examination and a yearly physical examination by a physician, the detection rate increases to approximately 75 percent. Therefore, it is clear that physical examination of the breast still plays a very important role.

MYTH #3: Repeat mammography is not necessary.

Some women believe once they have obtained a mammogram additional mammography is not necessary. Others are uncertain about the timing of repeat examinations. According to several studies, this misunderstanding is particularly high in the black and Hispanic communities. Both the American Cancer Society and the American College of Radiology

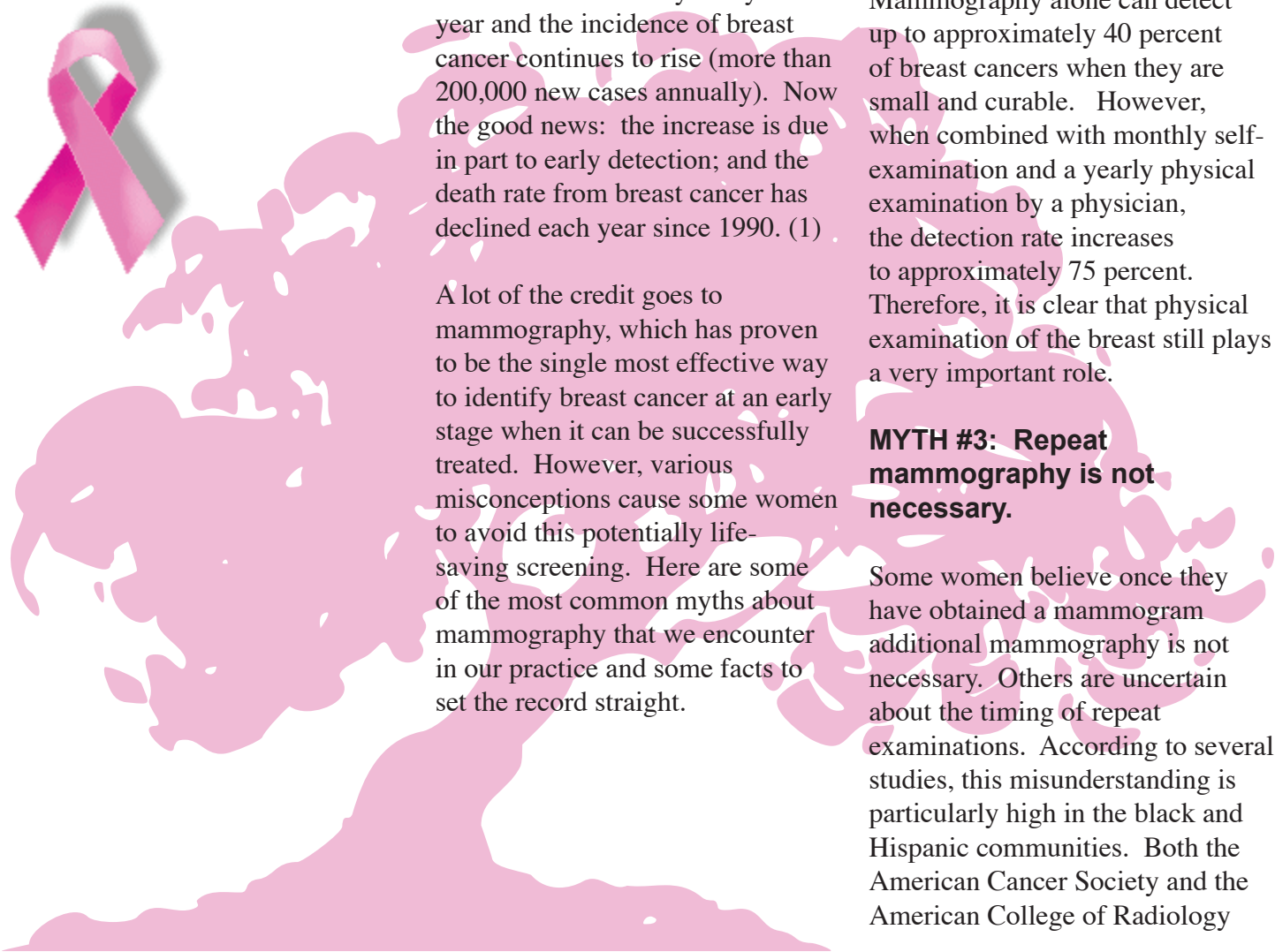
Age Specific Probabilities of Developing Breast Cancer* (2)

If current age is:	Probability of developing breast cancer in next 10 years is:	Or 1 in:
20	00.05%	1,985
30	00.44%	229
40	01.46%	68
50	02.73%	37
60	03.82%	26
70	04.14%	24
Lifetime risk:	13.22%	8

* Among those free of cancer at beginning of age interval. Based on cases diagnosed 2000-2002. Percentages and "1 in" numbers may not be numerically equivalent due to rounding.

Every October since 1985, Americans have been reminded about issues related to breast cancer, especially the importance of early detection. However, despite the best efforts of the Breast Cancer Awareness Month campaign, the disease still kills more than 40,000 women in this country every year and the incidence of breast cancer continues to rise (more than 200,000 new cases annually). Now the good news: the increase is due in part to early detection; and the death rate from breast cancer has declined each year since 1990. (1)

A lot of the credit goes to mammography, which has proven to be the single most effective way to identify breast cancer at an early stage when it can be successfully treated. However, various misconceptions cause some women to avoid this potentially life-saving screening. Here are some of the most common myths about mammography that we encounter in our practice and some facts to set the record straight.





Screening versus Diagnostic Mammograms

Photos by Lacey Day



Screening Mammogram:

Performed on an asymptomatic woman, reviewed by a radiologist and interpreted after she leaves the facility.

currently recommend that women have mammography annually beginning at age 40.

MYTH #4: Breast cancer is less of a concern after age 65.

Increasing age is the major risk factor for breast cancer (see chart below). Despite this fact, a study in 1999 by the National Cancer Institute revealed approximately one-third of women over age 65 are less concerned about breast cancer and therefore do not obtain mammography as often as they should. The study also demonstrated that many of these women were unaware as to how often mammography should be obtained.

MYTH #5: You won't get breast cancer if it doesn't run in your family.

Eighty percent of women who get breast cancer have no family history. Although the risk is certainly increased for women with a family history of breast cancer, all women should obtain annual mammography beginning at age 40.

MYTH #6: Anything that shows up on a mammogram is breast cancer.

The majority of potential abnormalities identified by mammography are benign. Even for those cases which proceed to biopsy, only approximately 20 percent prove to represent breast cancer.

MYTH #7: Screening mammograms reduce the risk of breast cancer.

Mammograms themselves do not reduce the risk of breast cancer. However, as previously noted, mammograms significantly improve the chances of detecting early breast cancer when it can be effectively treated.

MYTH #8: The radiation from mammography can cause breast cancer.

The radiation dose from current mammographic equipment is so low it is considered negligible. As an illustration, the risk of developing breast cancer due to a mammogram is similar to the risks of:

- Having an accident traveling 70 miles by air.
- Having an accident traveling 10 miles by car.
- Developing cancer or heart disease smoking one-eighth of a cigarette.
- Existing for 3 minutes at age 60 and getting sick or dying.

MYTH #9: You need a doctor's order for a mammogram.

It is not necessary, but the majority of mammograms are performed with a doctor's order. It is better to have a relationship with a physician since annual clinical



Diagnostic Mammogram:

Performed on a woman with some sign or symptom raising the possibility of breast cancer; or on a woman with a personal history of breast cancer. This exam is ideally reviewed by a radiologist at the time of the exam so, if necessary, any additional mammographic or ultrasound views can be performed before the woman leaves the facility. Examples of indications for a diagnostic mammogram include: a lump, a bloody nipple discharge, or unusual breast pain.

breast examination is an important part of the breast cancer detection process.

MYTH #10: Insurance does not cover mammography.

Most insurance programs do cover screening mammography.

MYTH #11: Medicare does not cover mammography.

Medicare does cover annual screening mammography.

MYTH #12: I am too young to need a mammogram.

Although it is true that screening programs in the past have focused on the age group around 40 to 50, anyone of virtually any age may need a mammogram if they have signs and symptoms raising the possibility of breast cancer.

MYTH #13: Mammography is not 100 percent accurate so why should I have it?

No medical test is 100 percent accurate. The overall false-negative rate for mammography is approximately 10 percent nationally.

MYTH #14: Screening mammograms are good enough for follow-up of breast cancer patients.

In fact, it has been demonstrated that the detection rate for breast cancer in these patients is significantly higher when

a diagnostic mammogram is performed, supervised by a radiologist, and especially when correlated with ultrasound examination if necessary.

MYTH #15: Ultrasound can replace mammography.

Ultrasound is a good tool for problem solving in diagnosing breast cancer. However, as a screening study to detect early breast cancer, ultrasound has not proven nearly as effective as mammography. Therefore, mammography remains the first line of defense against breast cancer.

MYTH #16: Mammography hurts.

Compression of the breast during mammography is necessary to obtain adequate images. While this is uncomfortable, most women find it is tolerable and certainly not as bad as they expected. The discomfort can be diminished by scheduling your mammogram a week or two after the onset of your period instead of just prior to menstruation when your breasts are the most swollen and tender. In addition, the compression pads on many of the newer mammography machines are more flexible than those on older machines, resulting in a more comfortable examination.



MYTH #17: With the “new” mammography machines, compression is not necessary.

This is a misconception about the new digital mammography equipment. Digital mammography is capable of detecting breast cancer more quickly and reliably, and more often avoids the necessity of taking repeat images than conventional mammography. However, even with digital mammography, compression of the breast is still very important.

MYTH #18: Only women get breast cancer and need mammography.

Although men have much less breast tissue than women, they can and do get breast cancer. Annually, roughly 1,600 men in the United States will develop breast cancer and many of these will need to have mammography.

In addition to early detection of breast cancer, a modified lifestyle can go along way toward prevention. Here are a few guidelines for decreasing your risk:

- Maintain a healthy weight.
- Eat a sensible diet that includes more vegetables, fruits and whole grains and fewer high-fat foods.
- Exercise regularly.
- Drink alcohol in moderation or avoid it entirely.
- Don't smoke.
- Know your family history.

Sources:

- (1) American Cancer Society, Breast Cancer Facts & Figures 2005-2006, Atlanta: American Cancer Society, Inc.
- (2) American Cancer Society, Surveillance Research, 2005.
- (3) <http://www.nbcam.com/aboutBC.cfm>



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