



## **Breast Self-Exam: How it Works and Why the Confusion?**

The Be Aware foundation has recently released two new video that provide instructions for doing a breast self-exam (BSE) with confidence; read press release. The 8 minute video provides detailed information on performing BSE and the 2 minute video is a summary of key points. The response to the video has been very positive form both patients and physicians, but questions about the potential for BSE to save lives remain. This month's article will outline the controversy and provide the perspective of physician that has promoted BSE for nearly 40 years.

The American Cancer Society (ACS) and the United States Preventative Services Task Force (USPSTF) have recently removed BSE from their screening guidelines, and instead suggest that doing regular BSE should be a women's choice.<sup>1</sup> However, it is recommend that women are "aware" of their breast and report any changes to their physicians. The obvious question is, how can women be aware of changes in their breast if they do not do regular BSE? Neither organization has provided a clear explanation of what they mean by "breast awareness" or how women should become breast aware.

The decision to drop BSE from their standard screening guidelines was based on the results of three large international studies compared the mortality rate of women doing regular BSE versus women not trained to do BSE (screening mammography was not available to either group). The largest studies was done in Shanghai China and involved 266,000 factory workers, half of whom were instructed to do BSE and other have receive no instructions.<sup>2</sup> After 10 years of follow-up, there was no mortality reduction in the women who were taught to do BSE.

Just how this study applies to American women who have access to screening mammography and use BSE as an additional layer of protection in detecting early breast cancers has never been adequately addressed, and for obvious reasons, no future study will be performed that restricts women's availability to mammographic screening. There are, however, many recent studies that do support the concept that doing BSE along with screening mammography is more effective in detecting early breast cancers than do only mammography screening.

For example, in a recent study form Duke University of 146 high-risk women who were followed over a three year period, 47% on the cancers were first detected on BSE, and many of these cancers not even detected on screening mammograms.<sup>3</sup> This study demonstrates the limitation of screening mammography in young women with dense breasts, and the value of doing regular BSE in addition to mammographic screening. A recent report from Harvard provides further support for the value of BSE in younger women. In the Harvard study, 71% of cancers detected in women 40 or younger were first detected by women doing BSE.<sup>4</sup>

Finally, a study published this year from the Mayo Clinic in Arizona review a series of 782 who were diagnosed with breast cancer. The study demonstrated that women under 50 year of age were more likely to present with a palpable breast lump than have their cancer detected on screening mammography.<sup>5</sup> The study also found that in the group of women who did routine mammographic screening, two thirds of the cancers were found on the mammogram and one third first presented as breast lumps. The authors suggest that this study may have underestimated the percent of breast cancers presenting as lumps among women doing screening mammography because of the relatively small sample of young women in their study population. The authors conclude that until better imaging techniques become available BSE and clinical breast exam will continue to play an important role in breast cancer diagnosis.

These 3 recent studies provide clear evidence that doing BSE in conjunction with mammographic screening provides an added layer of protection in early detection of breast cancers. The skeptics will continue to point out that there is still no scientific proof that doing BSE in conjunction with mammography reduces breast cancer mortality, and it is unlikely any study will be done in the near future that provides the proves the point one way or



another. Thus it becomes a matter of common sense. We know that cancer is a progressive disease, and we also know that scientific studies have proven that routine screening mammograms reduces breast cancer mortality by more than 30%.<sup>6</sup> We also know that many breast cancers are not detected on screening mammograms, and that doing proper BSE identifies many of the cancers missed on screening mammograms.

I think it is fair to conclude that, although there is no proof that BSE can reduce breast cancer mortality rates, early detection of breast cancers has the potential to improve survival, and delayed diagnosis is typically associated with a reduced potential for survival. In my experience, most women do not do BSE with confidence, and women that are taught to do proper self-exam are capable of finding very small and potentially curable breast cancers that are often missed on mammographic screening. I am convinced that doing proper BSE as outlined in our recent video package could save lives and reduce the need for mastectomy and chemotherapy. It also can significantly reduce medical costs. Thus, doing BSE with confidence has the potential to be a win/win/win, and it's free.

Be sure to watch and share our educational video showing women how to do a breast self exam with confidence.

If you have any questions on breast self exams or breast cancer, feel free to Ask The Doctor or contact us.

#### References:

- 1 <http://www.ihe-online.com/feature-articles/breast-cancer-screening-with-breast-self-examination-not-yet-a-dinosaur/>
- 2 Thomas DB, Gao DL, Ray RM, et al. Randomized trial of breast self-examination in Shanghai: final results. *J Natl Cancer Inst.* 2002 Oct 2;94(19):1445-57.
- 3 Wilke LG et al. Breast self-examination: defining a cohort still in need. *Am J Surg.* 2009; 198: 575-579.
- 4 Srila Samphao et al. Diagnosis of breast cancer in women age 40 and younger: delays in diagnosis result from underuse of genetic testing and breast imaging. *Am J Surg.* 2009 Oct;198:538-43.
- 5 Ma I, Dueck A, Gray R, et. al. Clinical and Self Breast Examination Remain Important in the Era of Modern Screening. *Annals of Surgical Oncology.* 2012;19:1484-1490.
- 6 Tabar L, Yen MF, Vitak B, et. al. Mammography service screening and mortality in breast cancer patients: 20-year follow-up before and after introduction of screening. *The Lancet,* 2003;361:1405-1410.