



## POSITION ON BREAST SELF EXAMINATION (BSE) AND EARLY DETECTION

### Overview:

In response to inquiries from the YSC community regarding Breast Self Examination (BSE) and early detection and in light of recent studies on BSE, the YSC has developed this position statement. Our goal is to educate YSC constituents and young women on BSE and early detection so they make informed healthcare decisions.

### Background:

In the October 2, 2002, issue of the JNCI, Thomas et. al., reported that BSE did not decrease mortality in a study involving 266,000 female factory workers in Shanghai aged 30-63. Forty percent of these women were 30 - 40 years old. The study divided the women into two separate groups. One group was instructed on how to perform formal BSE while the control group was given lower back pain instruction. Formal BSE is doing a breast self-exam in a certain way, often based on shower card instructions, at the same time of the month, each and every month. There is an important distinction to be made between formal BSE and telling women to be aware of what their breasts feel like and any changes that may occur. It is this formal BSE that was studied and is the issue of much contention. Neither group had mammography, clinical exams nor ultrasound. In both groups, the women found their own cancers. In both groups, the size, stage and mortality of cancer was the same. **In other words, the cancers found doing formal BSE were not any more or less severe than the cancer found by women on their own with no "formal" instruction.** Therefore, the benefit of BSE remains unproven.<sup>1</sup>

Although monthly breast self-examination and annual clinical examination have not been proven to save lives, women should still be familiar with the look and feel of their breasts. By knowing what the normal variation is through her monthly cycle, a woman may be able to recognize a change in her breast that should be evaluated by a doctor. There are several diagnostic techniques that the doctor can use for women in whom a palpable mass is present or suspected:

- **Mammography** can be useful, but is often non-diagnostic or falsely negative. A recent study has shown that mammographic sensitivity is 71% for women with palpable masses who are ages 40 or younger - i.e., 29% of palpable cancers in this age group will go undetected by mammography.<sup>2</sup> The miss rate is variable - it will be higher in women with the densest breasts and lower in those with fatty breasts.
- **Ultrasound** is currently best used as a tool to evaluate a suspicious area of a woman's breast that is detected either through palpation or mammography.<sup>3</sup> Studies evaluating ultrasound examination targeted to a palpable mass found its sensitivity to range from 84%<sup>2</sup> to greater than 95%.<sup>4-6</sup>.
- **MRI** Because of its relatively high false positive rate and without proof of a low enough false negative rate, MRI should **not** be relied upon to diagnose or confirm palpable masses with certainty.

It is important to understand that the above discussion is about diagnostic testing of a breast in which there is a palpable lump. Using these methodologies to screen for the disease before a lump is felt is not warranted in young women unless she is at high risk for breast cancer.\*

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Young women facing breast cancer together.

## YSC Position:

YSC strongly advocates for the scientific and medical communities to develop an accurate and effective methodology for breast cancer early detection and diagnosis in women 40 and under. Although breast cancer is less common in women under 40 than their older counterparts, it is the leading cause of cancer death in young women ages 15 - 40. One in every 251 women currently aged 30 will be diagnosed with breast cancer within the next 10 years.<sup>7</sup> However, there is currently no reliable or proven screening methodology to detect cancer early in young women. Even when a lump is felt, the available imaging methodologies are not always adequate for the dense breasts of a young woman and clinically suspicious lumps should be biopsied even if the imaging tests are negative.

Since advances in screening and diagnostics will only be achieved through participation in clinical trials, the YSC encourages high-risk women who are screened regularly to do so through a clinical trial. Breast cancer in young women is still a relatively rare disease; it is highly unlikely and unnecessary for screening methodologies to be developed as a public health intervention for all young women. Only young women considered at 'high risk' will benefit from such screening programs. Yet, if we can define better screening options and guidelines for high-risk young women, all will benefit.

YSC does not endorse the practice of a formal BSE. Instead, until there are reliable early detection and high-risk screening methods, the YSC recommends that young women be familiar with their breasts and be able to detect any change from the norm. If an irregularity is found, a woman must insist that it be completely evaluated by her physician. Young women must be their own best health advocates and the YSC understands that it is a personal choice whether to do a formal, monthly BSE. To make this decision, it is important that young women know the facts about breast cancer and the limitations of current early detection methods.

To this end, YSC urges the medical community to work with us to educate patients about the facts of breast cancer in young women and to encourage more research in better early detection methods for this population.

\* Some things that put a young woman at increased risk: a previous history of breast cancer; a first degree relative who has had breast or ovarian cancer, especially if it was diagnosed pre-menopause; having a mutation in the BRCA1 or BRCA2 gene; and, having radiation treatment to the chest during childhood or adolescence.

## References:

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3. Institute of Medicine. *Mammography And Beyond: Developing Technologies For The Early Detection Of Breast Cancer*, Committee on the Early Detection of Breast Cancer; Sharyl J. Nass, I. Craig Henderson and Joyce C. Lashoff, editors, Washington, DC, National Academy Press, 2001: 225
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