Breast self-examination
Is it really so dangerous?

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We all witnessed the shock waves among women and within the medical community after the latest Canadian recommendations on breast self-examination (BSE) were released. One newspaper article title read: "BSE is dangerous." That is strong language!

Let us take a closer look at BSE, which seems to be losing credibility. In 1994, the Canadian Task Force on the Periodic Health Examination issued a type C recommendation for BSE. A type C recommendation means there is not enough evidence either for or against including BSE in a periodic health examination.[1]

This group, now called the Canadian Task Force on Preventive Health Care, decided to review various studies to determine whether BSE is effective in screening for breast cancer and then to recommend whether to teach BSE. After 2 years' research, the Task Force concluded that acceptable data supported recommending that this screening test not be done as part of the periodic health examination for women 40 to 69 years old (type D recommendation).[2] The Task Force also thought that BSE did not have any real benefit and, in fact, had disadvantages that must be taken into account. None of the studies reviewed by the Task Force found that BSE screening resulted in significant reductions in breast cancer mortality rates.

Following this news, all sorts of questions were asked by women's groups, the medical community, and, of course, women themselves. Is the evidence of BSE's ineffectiveness convincing and conclusive? In what way is BSE dangerous? Should we still encourage women to do BSE? Before we throw the baby out with the bath water, we should take a closer look.

Study conducted in Shanghai, China

The Task Force was most interested in a rigorous study conducted in China (Shanghai) that involved 260 000 women. At the beginning of the study, women were taught to do BSE, and their technique was checked on models of breasts made of silicone. Compliance was monitored, and it was found that most of the women performed BSE regularly throughout the study.

Results showed that routine BSE did not reduce breast cancer mortality rates. Moreover, lumps found by women doing BSE were the same size as those found by the control group not trained in BSE. In addition to causing women to visit their doctors more frequently, BSE resulted in double the number of biopsies of benign masses and thus led to greater risk of scarring, infection, and residual pain—not to mention the stress, anxiety, and depression women experienced while waiting for their results.[2,3]

Factors at work in North America

Before generalizing these results, we have to take into account factors at work in North America. For example, women in Asia are at lower risk of dying from breast cancer than women in North America. If a woman from Asia moves to North America, her risk of breast cancer increases. In other words, environment and lifestyle are important.[3] We also need to consider whether the investigative techniques used in the Chinese study were more invasive than those used here in North America. Are adverse effects of biopsy as common here as in China? Where treatment is concerned, chemotherapy has made a huge difference in breast cancer mortality rates. How do treatments for breast cancer used in Shanghai compare with treatments used here? Finally, it is important to remember that this study goes back only 5 years. We must interpret its findings very conservatively. We know, for example, that effective screening has to be in place for at least 10 years before a reduction in mortality rates is seen in a given population. We also know that the disadvantages appear before the benefits.[4]

Other studies examined by the Task Force had similar results: six of the seven studies had comparable findings, but several had contaminated samples and sampling biases. The eighth study reported a slight decline in the mortality rate, but it too had a notable sampling bias.

Should we stop practising BSE?

Does this mean that we should stop practising BSE because it is dangerous or no longer considered effective? I think not. Women do BSE for reasons other than breast cancer screening. I believe that BSE can help women play a more active role in caring for their health, especially by becoming more attentive to, and aware of, changes in their breasts. They might consult their family doctors more promptly if changes do occur.

Should BSE be recommended to all women regardless of age and risk factors? At the risk of offending some of you, I do not believe so.

In looking at all the recommendations that we make to our patients, I asked myself if we sometimes make them for our own reasons without checking with patients to see whether they are able to make changes at that point in their lives. Do we take the time to check whether they understand the importance of changing a risky behaviour? For example, if a 30-year-old woman has smoked for 15 years, perhaps it would be better for her to focus on quitting smoking rather than BSE.

Breast self-examination is not a medical procedure; it is a way of taking charge of your health. In and of itself it is not dangerous, but it can lead to unnecessary examinations and worry. That is why it is so important to take the time to explain the benefits and disadvantages of BSE so that women can make an informed decision. If they want to know how to do BSE, I believe that they should be taught to do it.

It would be unfortunate if a lack of information and openness on the part of organizations involved in fighting breast cancer, or erroneous interpretations of new information that comes to light, were to lead to a wave of pessimism about every screening method: BSE, mammograms, and clinical breast examinations performed by physicians should not be grouped together indiscriminately. Studies show that mammograms accompanied by clinical breast examinations are effective at screening for breast cancer.

Research is under way to investigate the role of BSE in fighting breast cancer. In 5 years, we might have a clearer picture of which women could benefit from it. In fact, it would be very interesting to see whether women who regularly do BSE consult their family doctors for periodic health examinations more often and whether they are more receptive to mammogram screening than women who do not do BSE.

Bottom line

While we wait for definitive results from the studies currently under way, I think it is important to remember the following.

- Breast cancer remains a serious health problem.
- Screening mammograms accompanied by clinical breast examinations are effective for breast cancer screening.
- Physicians should explain the benefits and disadvantages of BSE to women who ask about it, without overly promoting it. Women should also be reminded that, even if they find nothing during BSE, they should still have their doctors perform clinical breast examinations or mammograms.
- We should also be prepared to review our own practices as new recommendations continue to be made in light of new research findings.

I hope the medical community, women's groups, and breast cancer organizations can reach consensus about the messages we send to women about breast cancer screening.

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References

1. Canadian Task Force on the Periodic Health Examination. *Canadian guide to preventive clinical health care*. Ottawa, Ont: Supply and Services Canada; 1994.
2. Baxter N. Preventive health care 2001 update: should women be routinely taught breast self-examination to screen for breast cancer? *Can Med Assoc J* 2001;164(13):1837-46.
3. Quebec Department of Health and Social Services. *Forum sur l'auto-examen des seins*. Forum on breast self-examination organized by the Quebec Department of Health and Social Services; Quebec city, Que; 2001 September 14. Quebec, Que: Department of Health and Social Services; 2001.
4. Nekhlyudov L, Fletcher SW. Is it time to stop teaching breast self-examination? Commentary. *Can Med Assoc J* 2001;164(13):1851-2.