

Breast self examination: be alert but not alarmed?

Have recent controlled trials ended the debate?



EACH YEAR in Australia over 10 000 women are diagnosed with breast cancer and around 2600 women die. Early diagnosis improves survival chances.

Imagine the following scenario. You have just completed an annual examination of a married, 36-year-old mother of two, when she casually asks: “Doctor, would you recommend that I practise monthly breast self examination?” What do you tell her? What if this patient happened to be a healthy 59-year-old postmenopausal woman, or, for that matter, a “senior citizen” of 81 years, or a woman with a family history of breast cancer? What advice would you proffer? Would you rely on evidence-based data and diplomatically state: “Well, there really is no evidence that breast self examination reduces mortality rates”, or would you say “We don’t endorse breast self examination, but it would be advisable for you to develop an awareness of your breasts”? What “endpoints” are uppermost in your mind — mortality, detection, even prevention? Perhaps more significantly, what “endpoints” are uppermost in your patient’s mind?

This is a common dilemma confronting clinicians as they grapple with the vagaries of epidemiology, clinical experience and patients’ needs for information and advice. For decades, public health campaigns have targeted women with the message that early detection of breast cancer translates into improved survival chances, and that examination of breasts and mammography are the first steps on the road to early detection. However, following recent trial results,¹ those advising women appear to have forgotten this vital relationship between breast self examination, early detection and consequent improved survival. “Detection” has become the “poor cousin” of survival, mortality, and the teaching and practice of breast self examination. The result is confusion, ambivalence and, at times, contradictory or nonsensical advice.

This is clearly reflected in the various statements promulgated by Australian cancer organisations, which now tread very carefully when using those three, once so helpful, words, “breast self examination”. BreastScreen NSW has dropped them from its recommendations and state cancer councils, the National Breast Cancer Centre and the NSW Breast Cancer Institute are in the process of doing same, or are carefully rephrasing them to being simply “breast self aware”. As an example, The Cancer Council NSW Fact Sheet² recommends gaining awareness “by looking at your breasts in the mirror and feeling them from time to time”. This sounds pretty much like self examination of breasts to us, only without the previous instructions on how to do it effectively. The Fact Sheet sensibly continues “some women feel that regular breast self examination is worthwhile. It’s up to you”. Advice from other cancer organisations contains similar hedging statements.

These messages reflect the difficulty of interpreting evidence-based data derived from studies with differing end-

points — both for the clinical situation and for the commonsense advice sought by women. The National Breast Cancer Centre’s position statement is largely based on the comprehensive 1999 literature review of studies of breast self examination by Clarke et al.³ Of considerable significance are the methodological shortcomings of those studies and their diversity of endpoints. But most compelling is that, of the seven trials reported, none provided National Health and Medical Research Council Level I evidence, two gave Level II and the others Level III — not overly convincing!

In 2002, the eagerly awaited final report of the trial by Thomas et al¹ became available. Despite the fact that Thomas and colleagues concluded that this was a trial of the teaching of breast self examination (ie, the specific technique), not the practice of breast self examination (nor, indeed, a trial of the breast examination that many aware women do whether or not they are trained in the “breast self examination” technique), the editorial in the *Journal of the National Cancer Institute* trumpeted the study’s results as signalling the “death” of breast self examination.⁴ An editorial in the *British Medical Journal*⁵ claimed that Thomas and colleagues had provided “conclusive” evidence that breast self examination was not effective in reducing mortality, and concluded that the study should put an end to a decade of controversy. We believe that this statement is most unhelpful and could lead to delayed detection of breast cancer, particularly in younger women, for whom mammography is less effective.^{6,7}

While acknowledging that this was the largest trial ever conducted on the relationship between breast self examination and mortality from breast cancer, how transferable are results from women in Shanghai to women in Australia? A growing body of literature⁸⁻¹⁰ casts some doubt on the universality of the findings of Thomas and colleagues, as cultural context and associated values and behaviours were ignored. Potential confounding factors, such as attitudes towards breast self examination and healthcare, were not investigated.

The position of the Breast Cancer Action Group (NSW and VIC) is the commonsense approach — that women should be physically familiar with their breasts and seek advice if they notice any non-normal changes. If you feel a lump or notice other changes — and how else can this be done other than by physically examining the breasts? — take the next step on the triple-test path of mammography, ultrasound examination and biopsy.

Further concerns in this debate relate to the suggestion that encouraging awareness of breast changes will distress women, and will possibly increase the health dollars spent on unnecessary investigation. The first claim is patronising, even demeaning, and the second runs counter to the evidence-based public commitment to increase screening modalities for Australian women.

What is indisputable for Australian women is that breast examination is the predominant method of detecting breast cancer. In Australia, mammographic screening accounts for

just over 30% of detected breast cancers (37% of early disease, 14% of advanced disease);¹¹ the remainder are found by women themselves and their medical advisers. How are they found? By examining their breasts! For younger women this is usually the only avenue for detection — early or late — as clinicians rarely offer clinical breast examination, and mammography is not effective. Our research priority in this area would be for careful and well designed studies of the relationship between breast self examination and early diagnosis. What interests us is increased early detection, whether this be via breast self examination, mammography, or ultrasound examination. It is imperative that clear and unambiguous messages are transmitted to give women the best chance of survival. Resorting to the semantics of “being breast aware” fails this imperative. Common sense suggests that it is not possible for us to somehow be “breast aware” without examining them.

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