Psychological Distress and Breast Cancer Screening Among Women at High Risk: Where Are We?

In a recent article (1) and subsequent series of exchanges regarding psychological distress and breast cancer screening among women at high risk of developing breast cancer (2,3), several important issues were raised. These issues focus on the generalizability of the findings of the study by Kash et al. (1) and on the relevance of breast self-examination (BSE) as a screening measure, particularly for the sample of younger women (mean age = 44 years) with a family history of breast cancer. Major findings by Kash et al. (1) included significant psychological distress among women at high risk, including investigation (4) assessing compliance with screening in a sample of women at high risk not attending special clinics, we found poor BSE compliance, while clinical breast examination adherence was quite high (84%), although mammography adherence in the preceding year (54%) was poor. Interestingly, only 52% of the sample (n = 125) considered themselves to have an above average risk. This percentage is not markedly different from the percentage of patients in the Kash et al. study (1) who rated themselves at high risk (41%). In contrast, women attending our clinic for women at high risk for breast cancer generally overestimate their risk and report high degrees of adherence to mammography, clinical breast examination, and BSE, although BSE proficiency is markedly below par (Stefanek M, Wilcox P, Helzelsoeur K: manuscript in preparation). Thus, variables related to attendance at a clinic for women at high risk for breast cancer and knowledge of risk may be key differences in findings.

Finally, screening recommendations for younger women at increased risk as a function of family history are difficult to determine. Despite the endorsement of BSE efficacy by Kash (3), the issues related to BSE sensitivity and specificity are far from resolved (5). While mammography may be less helpful for younger women, we should not assume that BSE is preferable, given the very low occurrence of breast cancer in younger women (particularly among those aged 20-30 years) and the high frequency, psychological sequelae, and possible negative impact of false-positive results on subsequent breast cancer screening.

How do we best screen young women at high risk? While mammography may be of lower value in women less than 50 years of age, most women at increased risk report adherence (1,4). In addition, the Health Insurance Plan of Greater New York and the Breast Cancer Detection Demonstration Project data indicate some benefit for women 40-50 years of age. Independent of the ongoing Canadian trial, the benefits for an individual woman with a family history of breast cancer are likely to outweigh cost. Women immobilized by anxiety resulting in poor BSE performance (frequency and/or proficiency) may be best served by increasing the frequency of clinical breast examinations from annually to two to three times per year. While clinical breast examination proficiency is also variable, it is a behavior that, despite psychological stress, seven of 10 women adhered to in the Kash et al. study (1). Alternatively, women with low to moderate stress may well benefit from BSE teaching, given poor proficiency in this task independent of reported BSE frequency.

In summary, while psychological distress is itself an important quality-of-life issue possibly associated with increased risk, the impact of this distress on screening is quite critical. It appears premature to blindly abandon any of the screening modalities potentially helpful to women at increased risk. However, we need to be aware of the limitations, sensitivity, and specificity of all three screening modalities in younger women. Finally, given the limitations of mammography in younger women, more research.
to increase sensitivity and specificity in BSE and clinical breast examination is critically needed. Women at high risk for breast cancer may be best served by their physicians making recommendations for screening on an individual basis. In making these recommendations, the physicians should be sensitive to issues such as quality of individual mammograms, the clinical breast examination proficiency of the health care providers, and the individual psychological distress as the latter impacts on adherence to each of the screening modalities.

MICHAEL E. STEFANEK, PH.D.  
The Johns Hopkins Oncology Center  
550 North Broadway, Suite 1003  
Baltimore, MD 21205

References

Response
In response to Dr. Stefanek’s correspondence, there are three issues to be addressed regarding psychological distress and breast cancer surveillance among women with family histories of breast cancer.

First is the issue of what is meant by “high risk” for developing breast cancer. It is important to distinguish between women who have only one first-degree relative with postmenopausal bilateral breast cancer and women who have stronger family histories. Women who attend our breast surveillance program are a genetically enriched population and are less likely to have a sporadic breast cancer case in their family histories. The criteria for joining the Strang Cancer Prevention Center’s Breast Surveillance Program are as follows: 1) one first-degree relative with premenopausal bilateral breast cancer, 2) a mother and a maternal grandmother with breast cancer; or 3) two or more first-degree relatives with breast cancer. It is difficult to compare the women in our program with the women in Dr. Stefanek’s sample (1), since his study involved women who had only one first-degree relative with breast cancer and 61% of the women in his sample had postmenopausal unilateral breast cancer. Only 5% of the women in his sample had premenopausal bilateral breast cancer in contrast to 28% of the women in our sample. Also, 25% of the women in our sample had at least two first-degree relatives with breast cancer. In summary, Dr. Stefanek’s sample population may have risk levels closer to those found in the general population and not comparable with ours.

Second, we have endorsed all three methods of early detection (breast self-examination [BSE], clinical breast examination, and mammography) as important for women with family histories of breast cancer. We do not believe that BSE is preferable to either clinical breast examination or mammography, since there are false-negative and false-positive results with all of these procedures. We encourage women in our program for high-risk women to come in for a clinical breast examination every 6 months, have regularly scheduled mammograms (usually yearly, depending on age), and perform monthly BSE. The psychological impact of a false-negative result can be as devastating to a woman as a false-positive result. By using all three early detection methods in a younger population such as ours (mean age = 44 years), we minimize the likelihood of false outcomes and the resulting psychological sequelae.

The last issue addresses anxiety and psychological distress of women at high risk. In our study, we found that women at high risk were anxious and that this trait interfered with their surveillance behaviors. WELLISCH et al. (2) investigated the psychological functioning of daughters of breast cancer patients. They found, as we found, that an immobilizing anxiety was one of the emotional themes of women with family histories of breast cancer. Similarly, WELLISCH et al. found high levels of psychological distress consistent with the need for counseling. In both studies, reliable and valid instruments were used to measure anxiety and psychological distress. I would submit that further research into the causes of psychological distress in women at high risk for breast cancer requires attention to the use of such measures.