

An Evaluation of Individual Components of Breast Self-Examination

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Evidence supporting the efficacy of breast self-examination (BSE) is available,¹ but the BSE itself has not been scrutinized in detail; the effectiveness of individual parts of the examination has not been studied. The procedure now recommended by the American Cancer Society² involves three parts: (1) palpation while bathing, (2) inspection in the mirror with the arms in specified positions, and (3) palpation while supine. The relative complexity of the examination may contribute to lack of confidence in correct performance, one reason women have given for not doing the examination.³ Mahoney and Csima⁴ noted that inspection was the sole clinical sign in only 1 percent of 286 primary breast cancers found during physical examination and that palpation of the breast with the patient supine was consistently the most successful technique for detecting a mass lesion. They concluded the "inspection of the breast can safely be deleted from screening breast examinations, whether performed by the physician or by the patient." Haagensen,⁵ a key figure in the development of BSE, noted that inspection was not so important as palpation and that emphasis should be placed on palpation. The present study was undertaken to evaluate the contribution of individual parts of BSE to the detection of breast disease.

Methods

Women entering the University Hospital Surgery Clinic at the University of Washington from October 1982 through March 1983 were surveyed. Patients with breast disease or with concerns about possible breast disease were eligible for participation. As potential subjects were placed in

examination rooms, nursing staff introduced the study and left each patient with a questionnaire requesting information in four areas: (1) how the breast disease was discovered or suspected, (2) whether BSE was done, (3) what parts of BSE were performed, and (4) what part of BSE resulted in disease discovery or suspicion. As patients completed and returned the questionnaires, nursing staff added the diagnosis, if known, using the medical record. Completed questionnaires were given to the investigators without identifying information of any kind.

Results

A total of 136 women responded to the questionnaire, and 130 responses were sufficiently complete for analysis. Ninety-two of these women performed BSE. Nine questionnaires were incomplete as to the specifics of the examination. Of the 83 women with complete questionnaires, 48 percent (40) included only palpation, 43 percent (36) included both palpation and inspection, and 8 percent (7) performed inspection only. Palpation was done supine by 77 percent (64) and while bathing by 61 percent (51) of women. Inspection was performed in the arms-overhead position by 51 percent (42), in the arms-at-sides position by 30 percent (25), and in the hands-on-hips position by 10 percent (8) of women.

Of the 92 women performing BSE, 53 presented with concerns as a result of their examination. Breast disease was confirmed by other methods in 22 of these women. (The diagnoses for all women in the study are given in Table 1.) The examination done by BSE performers who found their disease did not differ significantly from that of those who did not discover their own disease. Of the 22 women with confirmed breast disease, 64 percent (14) found their disease while palpating supine, 27 percent (6) by palpating while bathing, and 9 percent (2) by inspection with arms overhead. No

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Table 1. Diagnoses Recorded by Nursing Staff From the Medical Record (n = 136)

Diagnosis	No.
Benign physical examination	41
No diagnosis stated	33
Cystic lesions	22
Cancer or rule out cancer or Paget's disease	18
Lump or fibroadenoma	11
Benign disease	5
"Dense tissue" or "thickening"	3
Rule out metastases	1
Pain	1
Nipple discharge	1

woman who claimed to do an examination that included both palpation and inspection found her disease by inspection; two women who claimed to find disease by inspection did not do palpation as part of their examination.

Comment

In this study, women claiming to do BSE were clearly not all doing the same examination. Further, it was found that no woman who included palpation found a disease by inspection. Simplifying BSE by limiting inspection to one arm position or by eliminating inspection may not reduce the

efficacy of BSE in disease discovery. The present study supports this conclusion and the study findings are consistent with the evaluation of the physical examination by Mahoney and Csima.⁴ A simplified examination may increase the confidence of women in BSE performance and thereby increase compliance.

Generalizability of the study is limited by the small sample size and by a possibly nonrepresentative patient population when compared with that of the average family physician's practice. Although further study is needed before definitive recommendations can be made, based on the results of Mahoney and Csima⁴ and the present study, women should be taught to palpate the breasts while supine. Women should be informed that skin changes may be a sign of cancer and a physician should be contacted if any are noticed, but routine inspection is not so important as palpation. If routine inspection is done, it may be limited to one arm position (arms overhead).

References

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Accuracy and Reliability of ICHPPC-2 Recording

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The *International Classification of Health Problems in Primary Care*, second edition (ICHPPC-2),¹ is widely used in recording morbid-

ity from patient-physician encounters. Based on the Ninth Revision of the International Classification of Diseases (ICD-9), ICHPPC-2 is concise and flexible: it comprises 362 rubrics common in the ambulatory environment, and its optional hierarchical structure permits increased specificity in problem identification when desired.² This classi-

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